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ABSTRACT

A study was conducted to explore the motivation for (or against) employer participation in long-standing school-business partnership programs that offer substantive work experience and learning at the worksite. Information was gathered through a literature search, in-person surveys of school personnel and selected employers (n=21), a phone survey of a larger sample of 224 employers, and employer focus groups in 7 sites throughout the United States. A total of 18 secondary schools were included in the survey, along with participating employers. Highlights of the findings are as follows: (1) schools tended to have both worksite-based programs and programs without such a component, with work areas usually determined by faculty skills and the few resources allocated to the partnership programs; (2) the extent to which students learn occupation-specific skills varies greatly among work sites, with such tie-ins most likely in comprehensive vocational-technical schools; (3) the schools are usually able to place all willing students in these programs despite their lack of organized and focused employer recruiting; (4) employers are generally pleased with the student workers and consider them productive employees; and (5) employers are motivated to participate in the programs as much by the desire to acquire entry-level workers as by the desire for community service. Recommendations were made to improve the knowledge component of the worksite programs and to increase employer recruitment. (The survey instruments are included in the report. Contains 30 references.) (KC)

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Recruiting and Sustaining Employer Involvement in School-to-Work Programs

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SCHOOL LESSONS

WORK LESSONS

Recruiting and Sustaining Employer Involvement in School-to-Work Programs

by
IRENE LYNN
JOAN WILLS

The Institute for Educational Leadership (IEL) is a 30 year old not-for-profit organization whose mission is to support policies, projects, and programs that encourage leaders to work together to improve education opportunities and results for children and youth. **The Center for Workforce Development** at IEL works on strengthening the linkages among schools, workplace learning systems, and postsecondary institutions, and seeks to establish more relevant and commonly shared benchmarks of excellence for education and training programs in both the private and public sectors.

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Irene Lynn is currently part of the Onestop Career Center implementation team within the Employment and Training Administration (ETA), U.S. Department of Labor. Ms. Lynn researched and co-wrote this report while a fellow at The Institute for Educational Leadership's Center for Workforce Development during 1992–93. Her prior work at the Department of Labor includes work on school-to-work transition issues with ETA's Office of Work-Based Learning and lead staff responsibility for a comprehensive review of the apprenticeship system conducted by the Bureau of Apprenticeship and Training.

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Ultimately, of course, the responsibility for the report rests with us.

Irene Lynn
Joan Wills

EXECUTIVE SUMMARY

The nation is currently focusing on many of the same policy issues that were relevant at the turn of this century, when business and union leaders advocated that the federal government provide support for the technical preparation of young people. Today, however, the challenge is reversed. At that time, the issue was how to engage the educational community in the preparation of future workers; today, the task is to identify ways to engage the nation's employers.

Federal, state, and local policy makers have increasingly directed attention and resources to developing strategies to prepare students for the workforce. The School-to-Work Opportunities Act, which commits the Departments of Labor and Education to collaborate with the states in constructing a national school-to-work system, was recently signed into law. The Administration's planned National Skills Standards Board is a companion initiative, created to develop and recognize skill standards based on the requirements of the workplace. However, while it seems that work-based learning schemes would be in employers' best interests, participation has not been universally embraced by the community.

Unfortunately, little is known about employer motivation (or lack of motivation) to participate in existing work-based learning programs. The framework proposed in the national school-to-work transition systems all feature a work-based learning component, which will vary in design from program to program but will re-

quire in all cases the active participation of employers. Although many prominent organizations have made efforts to draw conclusions about large-scale employer involvement, the endeavor may be premature—even the longest-running programs under inspection have been in operation for only three years or less.

Study Methodology

For this reason, the Institute for Educational Leadership and the National Center on the Educational Quality of the Workforce proposed to contribute to the body of knowledge in this field. The study was designed to provide insight on employer participation in long-standing employer-school partnership programs that offer substantive work experience and learning at the worksite. An advisory panel provided counsel on the general direction of the project and reviewed the paper once it was completed. The basic questions explored were:

- What kinds of institutional support, public policies, and practices influence employer decisions about participation?
- What are the most significant factors that impact an employer's decision to participate?
- What are the benefits to the employer for participating?
- What are the characteristics of participating employers?

The study had several basic components: a literature search; in-person surveys of school personnel and selected employers; a phone survey of a larger sample of employers; and the conducting of employer focus groups. Five metropolitan areas were targeted for the school and employer in-person and telephone surveys: Atlanta, Georgia; Indianapolis, Indiana; Pittsburgh, Pennsylvania; Phoenix, Arizona; and Portland, Oregon. Survey information from two additional sites—York, and Harrisburg, Pennsylvania—was also included in the analysis.

The study focused on school programs that substantially incorporated at least some of the following core components:

- training plans established for each student identifying learning objectives, general work readiness, and specific occupational competencies
- close supervision of the student at the worksite
- close and frequent coordination between the school and worksite

- periodic evaluation of the student's progress in meeting learning objectives
- paid work experience.

A total of 18 secondary schools—including comprehensive high schools, full-time and part-time vocational/technical schools, and one alternative vocational school—were included in the survey. Most of the programs represented a form of cooperative education, since these types of programs most readily meet the criteria for employer participation. Each school site provided a list of participating employers, who represented all major industry groups and firms sizes, to be included in the survey sample.

Findings

The employer/school interviews revealed a great deal of information about how work-based learning programs were organized and administered by schools; how employers were recruited and students selected; how work-based learning was structured; what attitudes surrounded employer involvement; and why employers don't participate. The authors describe these findings in detail and summarize them as follows.

With respect to schools, the study found that:

- in addition to programs including work-based learning, each school tended to have several occupation-focused programs without a work-based learning component, yet the programs are not inter-connected
- the occupational clustering was more likely to be a function of teaching-staff availability rather than any deliberate analysis of the surrounding labor market
- the programs are institutionalized within the school environment but in most sites are not a significant priority, as evidenced by the resources allocated for them.

With respect to school-to-work relationships, the study found that:

- the extent to which students learn occupation-specific skills varies greatly among work sites
- despite the lack of organized and focused employer recruitment efforts, the schools are generally able to place all participating students in these small programs

- the importance of the student screening function performed by the schools should not be undervalued
- there was greater assurance that the work-based learning is tied to the student's career path in the comprehensive vocational/technical schools or in an occupation-focused program
- as programs become well-established, employer recruitment is less of an issue.

With respect to employers, the study found that:

- contrary to popular belief, employers participating in these programs are pleased with the quality of students
- employers believe that the students are productive workers
- while community service is a strong motivation for employers, recruitment of entry-level employees is at least as strong a motivation
- many employers do not understand the elements of work-based learning
- very few employers cite child labor laws or worker compensation as issues affecting their decisions about participation.

Recommendations

The challenge of making these programs available to at least half of the nation's young students—not simply to one or two percent—is the focus of the authors' recommendations for designing national school-to-work transition initiatives. Their recommendations are geared toward assisting the following institutions: federal, state, and local program implementors, since the question of "going to scale" is largely dependent on the development of a "mainstreamed" education and training infrastructure; and employer-based organizations, since it will be necessary to create efficient and effective methods to support the expansion of work-based learning opportunities for students. The focus of this study—employers and the organizational relationships between them and key educational institutions—remains at the core of determining success for taking any school-to-work program to scale.

All implementation ultimately happens on a local level, but this does not mean that all strategies are best organized only at the local level. The following recommendations are designed to recognize those functions that require external support as well as those that must occur within local schools and worksites.

Recommendations for Public Institutions

To foster and support employer involvement in work-based learning, public institutions should:

- *Build a national support structure to develop materials for use in the classroom and on the worksite.*

  Take a lesson from academics, particularly math and science, and develop national voluntary standards and suggested curriculum frameworks. National teacher and administrator professional membership organizations should work with employer groups to identify content standards and "best practices." Frameworks can then be adapted for use by states and localities.

- *Take the learning plan seriously; focus on workplace requirements.*

  The employer survey made clear that training plans were not considered to be a serious tool; the school survey demonstrated that plans were not used as an instructional tool. For workplace proficiency, each student needs to learn several categories of skills within a hierarchy—categories of requirements which are components of high quality skill standards programs that reflect the range of skills needed in high-performance work systems.

- *Establish, through wide consultations, the purpose and uses of the learning plans.*

  States are readily able to frame the critical components of learning plans, which could be built around a common core of knowledge of both academic and skills standards. The framework should include the skills required in all work settings and the articulation between and among different types of education and training institutions.

- *Recognize the legitimacy of gradations of learning opportunities in different types of sites.*

  Large-scale employer participation is achievable, but not if the program is based on an inflexible design. There is a need to determine what should be learned, how the knowledge development should be sequenced, and how the schools can be organized to assure that this occurs.

- *Support screening and oversight roles.*

  One key reason that employers choose to participate in work-based learning programs is because they value the screening and oversight roles that school staff performs. This role helps to engage the school's teachers in linking the events of the classroom with the learning process occurring in the worksite.

- *Recognize the valuable commodity of time.*

  Time is limited by many constraints, such as state graduation requirements mandating a specific number of courses or class scheduling dictated by state or district regulations. Schools must be encouraged to create flexible scheduling opportunities for students, and state and district officials need to take leadership roles to ensure this opportunity.

- *Local school boards in concert with community college boards should hold joint focus groups with employers and staff involved in work-based learning programs.*

  Local policy-making bodies should listen to their staffs and employers who have previously participated in these programs to determine what changes are needed and to promote increased penetration of this form of learning.

- *Clear out the "underbrush."*

  Many assume that employers are prevented from participation because of the legal impediments contained in child welfare and labor laws. There is value in states conducting a systematic review of laws, regulations, and operating procedures that may hinder employer participation.

- *Support the development of the entire school staff.*

  Integration of curriculum must occur at the school level and across all disciplines. Time must be allocated for staff to work towards total integration of curriculum and programs.

Actions Aiding Recruitment

The following actions would aid in recruiting business and structuring work-based learning:

- *Keep it simple.*

  The transaction process between individual employers and the school-to-work "public agent" should not be cumbersome. To

make this possible, engagement of the employer community is required at several different levels.

- *Seek support from national organizations to help explain career opportunities and the requirements of industries and their key occupations.*

  For developing common occupations skill standards and understanding all aspects of an industry, national organizations offer a good starting point to help create the strong employer-based network needed to help promote a national school-to-work initiative.

- *Use employer-based organizations; create them if necessary.*

  National organizations can only provide information and support, but state and local employer-based organizations can help recruit employers, coordinate curriculum, establish internships for school staff, and establish articulation standards for tech-prep programs between schools and post-secondary institutions and work-site training programs.

- *Be deliberate; cover all industrial sectors.*

  Several industry sectors were substantially under-represented in the communities surveyed for the study. The low involvement of these sectors suggests that communication with these employers is limited. At minimum, communities need a database to organize employer contacts; the data should cross individual school and, at times, district boundaries.

- *Be informative; develop information materials in concert with local business organizations.*

  A specialized "yellow pages" could be used by all school districts and other training providers in a labor market area to reduce the contact cost. Listings that include types of jobs, sizes of firm, addresses, and telephone numbers of employers in the labor market area would help staff responsible for developing work sites for students.

- *Be inclusive of all sizes of employers.*

  A remarkable number of small businesses participated in the study; however, there are costs in soliciting and providing support to this very large group of employers. Centralized staff could be organized to work with local industry groups

and to communicate with individual businesses to describe the school-to-work initiative and determine employer interest.

- *Be deliberate in assigning the task of recruiting employers; organize recruitment through a community-wide network of specialized staff.*

  Teachers with classroom responsibilities do not have the time to recruit employers on the scale that is required. Instead, brokers who, if necessary, can cross school-district boundaries are needed.

- *Remember: success breeds success.*

  There are a number of satisfied customers of work-based learning programs in the employer community; they need to be used as ambassadors to their fellow employers.

1
INTRODUCTION

As the nation prepares to enter the twenty-first century, it will do so essentially addressing many of the same issues that faced our predecessors one hundred years ago. Both periods in our history share common features: they represent times of substantial change in the demands of the workplace, a large growth in the numbers of immigrants arriving in the country, and a substantial focus by both industrial leaders and public officials on how to improve the education system—particularly the technical preparation of students.

At the turn of the century it was generally agreed that the approaches to the training of workers had grown beyond the capacity of individual firms. During the early phase of the Industrial Revolution, individual firms or trade groups provided for the education—and often the living quarters—of their own workforce. Slowly, in the later half of the 19th century, manual labor schools emerged that combined occupational preparation with "mental" training. By 1910, most of the states had provided some form of industrial education.

Federal support for meeting the needs of the workplace through education began in 1917. The purpose was to promote vocational preparation in industrial arts and agricultural and domestic sciences (home economics for females). Yet, even with this early recognition of the need to help prepare students for a vocation, the organization of the schooling experience has increasingly been focused on the teacher-centered, academic model—an ap-

proach that has driven the organization of American schools. Accordingly, the reward structure for students and school employees alike has emphasized increasing the number of years of formal schooling.

Clearly, this emphasis has yielded some positive results. In terms of the number of years of free public education, America ranks near the top of industrialized countries. More students gain access to post-secondary education opportunities in the U.S. than in any other nation, and we have one of the highest rates in the world of formal education for native-born individuals. For those who finish high school, an impressive number enter some form of postsecondary education institution: in some states, 50 to 70 percent of high-school graduates pursue postsecondary education. Yet, estimates reveal that 80 percent do not complete their course of study. Some wander in and out of postsecondary institutions for ten years or more, in much the same fashion as they wander in and out of youth-focused labor market jobs.

Since the turn of the century, we have witnessed an increased cry from employers regarding the quality of new workforce entrants whenever labor markets have become tight. Once again policy makers are confronting the reality that strategies that only promote more time spent in the classroom have serious drawbacks. This time, a pattern of new initiatives by the education system has emerged in response to these concerns.

Revisiting the Need to Connect Work and School

Over the last decade, there has been a steady drumbeat of distress signals coming from the employer community as well as from the student population that what students learn is inadequate for the "new workplace." Far too many students are bored with school by the time they are fourteen or fifteen and are not provided instruction consistent with their learning styles. They often lack focus and direction, indeed they lack any real understanding of what they will do to earn a living, or what types of knowledge and skills they need to be successful in the labor market. They adopt a "waiting it out" attitude.

Since the William T. Grant Foundation Commission's reports on the students who comprise the "forgotten half"—those who do not continue their educations past secondary school—interest in creating an effective school-to-work transition system has greatly magnified. One of the key messages contained in *The Forgotten Half* was

the need for any school-to-work system to be of sufficient scale to serve a majority of students, not just a very few. While this issue is not new, external factors have provided a new impetus. No longer can the high school drop-out and graduate—both with poor academic competencies and no specific occupational skills—expect to eventually find a job that pays well. Previously, the concern focused on youth wasting years in secondary labor markets before moving into a career path. Now there is a more fundamental question that asks whether these young people will ever advance from secondary labor-market jobs or from low-paying service-sector jobs. This question has profound implications on our ability, as a nation, to maintain an acceptable standard of living for all Americans.

We are again focusing on many of the same policy issues which, at the turn of the century, caused business and union leaders alike to advocate that the federal government provide support for technical preparation of young people. Today, however, there is an important reversal of the challenge. A century ago, the core issue was how to engage the educational community in the preparation of future workers; now, the challenge is to identify ways to engage the employers.

Throughout this century the central focus of improving education has essentially been driven by the design and organization of the schools. Few programs, with some notable exceptions, have been organized to substantially include the workplace—in direct contrast to programs in almost all other industrialized countries. While the German apprenticeship model is perhaps the most familiar, it is clearly not the only approach used to involve the student in some form of structured learning, driven in large part by the needs of the workplace.

In most other countries there is an elaborate and influential network of employer-based associations that have as their primary task the responsibility to continuously articulate workplace requirements. These requirements are used for a variety of purposes by the education and training institutions which meet the specific cultural and economic patterns of each country. Such employer networks are viewed as essential partners in the organization and delivery of education in general and the occupational preparation of individuals in particular. Common features of organized employer networks in other countries include: (1) influencing curriculum, (2) articulating standards for use in assessment of students, (3) providing in-service training opportunities for instructors, and (4) providing structured work-based learning.

These networks, while national in scope, have sub-national networks designated to function at the regional and local level. They operate on a large scale and in many countries influence the educational preparation of at least half of a nation's student population at any point in time (Wills, Rice, and Sheets 1993). One of the key and valued roles of the education professional in many countries is that of a counselor and broker between the employer and student.

In direct contrast to our industrial competitors, in the United States the involvement of employers is essentially treated as a local—and not very important—component of school programs. The scale is small and the contribution modest. Also, the role of the education professional as a broker between the student and employers lacks a distinct "presence" in the U.S.

It is not as though our nation has no base upon which to build employer-based networks willing to work with the schools. There are a few national networks of employers which have been active in vocational preparation programs in this country, such as the Vocational Industrial Clubs of America (VICA), which is the sponsor of the Skills Olympics. Another employer-based network directly involved with a specific occupational area is the National Institute for Automotive Service Excellence (ASE). Conversations with employers who are actively involved in networks such as these reveal a high level of frustration with the seeming lack of ability on the part of many educational institutions to offer high quality and relevant education for their future workforce. These organizations (and others) are major advocates of expanding work-based learning programs and using industry-driven skill standards to drive a portion of the curriculum and assess students' knowledge.

Taking Heed

Federal, state, and local policy makers; leading educators; researchers; and various public interest groups have increasingly directed attention and resources to developing strategies that better prepare students academically and occupationally to enter chosen career paths. At the federal level there are two companion efforts currently being promoted by the Clinton Administration. The resources and energies of the Departments of Labor and Education have been committed to work with the states in a school-to-work system-building effort. Federal legislation, signed

in May of 1994, provides the framework and funding mechanism (through seed capital) to jump start this national school-to-work system. The companion effort is embedded in the Administration's recently enacted Educate America Act. Title V of that Act will establish a National Skill Standards Board to promote the development and recognition of skill standards based on the requirements of the workplace. The standards, once recognized by the National Board, will be made available for use in the school-to-work programs throughout the country. While the standards are to be "voluntarily used" by industry and education and training providers alike, they are to be based on input from business and industry networks of employers.

This approach is, in many ways, modeled on the lessons learned from other countries regarding the most effective and efficient ways to involve employers with the schools. These proposed national employer-driven networks are expected to help develop the knowledge and skill requirements of key occupations and to assist in the articulation of these requirements with attendant curriculum and instructional approaches for use in both formal classrooms and work-based learning systems.

For the school-to-work proposal, the federal response is based largely on approaches currently under development—approaches which, in turn, are modeled loosely after apprenticeship programs and similar models such as cooperative education. These approaches have in common the use of the work site as an integral part of a student's education. Available evidence (from adult apprenticeship programs, cooperative education programs, and the European experience) suggests very strongly that the work site can be a powerful and positive influence on educational attainment and on the acquisition of job-related skills. Empirical data also suggests that work, at least for high school students between the junior and senior year and during the senior year, has a positive impact on future employment and earnings (Bishop 1985).

The use of the work site, commonly called work-based learning, presents both opportunities and challenges. For students, carefully structured work experiences provide an opportunity to apply what they learn in the classroom, see the relevance of school to the workplace, and acquire essential work readiness and broad occupational skills.

In survey after survey, employers continually express their dissatisfaction with the quality of entry-level workers. They voice concerns not only about a lack of specific job skills but also about

employee attitudes towards work, communication skills, the ability to work with others, as well as work attitudes and habits (Barton 1990). Thus, for employers, work-based learning offers opportunities to translate these general concerns about work readiness into specific action. As one employer we interviewed said, "How else are they going to develop any work habits unless they get out in the workforce?"

While participation in work-based learning schemes is seemingly in the best interests of employers, it has not been universally embraced by the business community. In fact, successfully transforming fledgling experiments into a "school-to-work transition system" will require a considerable cultural change on the part of American business.

2
BUILDING ON WHAT'S KNOWN

Although the term "work-based learning" is new, the concept is not. There is a long history of partnerships between employers and secondary schools to provide students with structured work experience and work-based learning opportunities. Cooperative education (co-op)—the oldest and most commonly available work-based learning program—has been formally recognized in federal law since the 1917 Smith-Hughes Act, which mandated that co-op be made available for vocational agriculture students (Scott 1993). While there is no single model of cooperative education, it is generally a planned program that combines classroom instruction with paid work experience relating to a career program of instruction or a student's career interests. Students receive credit for their work experience; there is a formal relationship between the school and the employer that defines expectations for the student, the school, and the employer; and there is a provision for evaluating the student's performance on a regular basis.

During the 1989–1990 school year about 130,000 students were enrolled in secondary-level co-op programs, or about 8 to 9 percent of the junior and senior level high school student population (U.S. General Accounting Office 1991). Because there is no formal reporting system for cooperative education enrollment, it is difficult to place this level of enrollment in a historical context. However, considering the lack of direct federal support for cooperative education, this is probably *not* an all-time high level of enrollment for cooperative education.

A 1990–1991 school year survey by the National Assessment of Vocational Education examined the involvement of schools in these programs. They found that 49 percent of secondary schools offered co-op programs. Other types of school-to-work transition programs offered (all with some level of employer involvement) by secondary schools included work experience (34 percent); school-based enterprise programs (19 percent); school-to-apprenticeship (6 percent); and youth apprenticeship (2 percent) (Stern et al. 1993).

The current level of employer involvement in secondary-level co-op and similar work experience programs could be considered to be quite remarkable, given the lack of federal support and the lack of direct incentives to employers. This has not always been the case. In the 1960s through the early 1980s, federal statutes did provide specific funding support for cooperative education. Categorical support was provided under the Vocational Amendments of 1968. The Carl Perkins Act of 1984 provided no designated amount of money for co-op, but stipulated that under the basic grant vocational services would include work-site programs such as cooperative education and others. The 1990 Act makes only passing reference to cooperative education. In addition, between 1978 and 1981 targeted job tax credits were widely available to employers who participated in both secondary and postsecondary cooperative education programs. Now, such tax credits are available for economically disadvantaged populations. In 1987, only 1,600 employers nationwide claimed a targeted job tax credit (U.S. General Accounting Office 1991).

Between 1977 and 1981 the Department of Labor funded a series of eight pilot projects to test the feasibility of in-school apprenticeship. These eight projects mostly worked with small employers in manufacturing and service; four continued after the federal government funds were withdrawn. Employers who participated were surveyed: 57 percent were very satisfied and 34 percent were somewhat satisfied with the students. Employer subsidies were a part of the pilot projects for training expenses up to one-half of the wage, not to exceed $2,100 per student per year. However, evaluators concluded that these subsidies did not generate positive outcomes commensurate with their cost. On the whole, employers were more attracted by the programs' emphasis on screening and training of entry-level workers than they were on the subsidies offered. Those employers who were most

attracted by the economic incentive of the subsidies also tended to provide the poorest training outcomes (Glover 1984).

Understanding the dynamics of long-standing school-employer partnerships would, undoubtedly, help inform the development of the new school-to-work transition system envisioned by federal policy makers. Yet, a review of past research and literature failed to uncover any recent studies (within the last 15 years) that focused on issues surrounding employer participation in co-op and other established work-based learning programs—with the exception of evaluation of pilot in-school apprenticeship projects.

The most relevant study, a 1977 assessment of cooperative education, looked exclusively at postsecondary cooperative education programs. This study surveyed both participating and nonparticipating employers. Interestingly, a large percentage of employers not participating (41 percent), indicated that they would, if asked, participate. Of those employers unwilling to participate, most cited the lack of suitable job openings as the reason. A smaller percentage believed that the costs would not make participation worthwhile.

By and large those employers who did participate in cooperative education programs were highly satisfied with the program, and about 40 percent indicated a willingness to expand their level of participation. For-program directors, employer recruitment was cited as a frequent barrier to successfully implementing the program. However, once programs were successfully implemented, the recruitment of employers presented either "some" or "little" difficulty (Frankel et al. 1977). Whether these findings might be applicable to employers and programs at the secondary level has not been previously explored.

3
WHY THIS STUDY?

Unfortunately, we know much less than we should about employer motivation (or lack of motivation) to participate in work-based learning programs. A host of employer-focused issues remain largely undocumented: Why do they choose to participate? What are the business incentives that make sense for them? How satisfied are they with the quality of students and their relationship with the school? How much turnover is there among participating employers?

The national framework proposed for the school-to-work system features a work-based learning component as part of all local school-to-work programs. While the design of this work-based learning component will vary from state to state and community to community, it will include in *all* cases the active participation of employers. Employers will be called upon to help design and administer programs, develop job training plans, shape school curricula, and provide work experience and work-based learning. Understanding how to recruit and *keep* large numbers of employers involved is critical to:

- informing federal policy makers who will be providing guidance and leadership to the states
- developing state and local policies that provide institutional support for employer participation
- devising appropriate and necessary incentives
- developing strategies for outreach and marketing to the employer community.

A number of prominent organizations such as Jobs for the Future, the Manpower Development Research Corporation, the National Institute for Work and Learning of the Academy for Educational Development, and individual experts are engaged in various developmental and research activities relating to youth apprenticeship and similar student work-based learning programs. These efforts will undoubtedly yield a wealth of information on issues relating to employer participation. For example, Stephen and Mary Agnes Hamilton, reporting on their first year of experience in establishing a youth apprenticeship program, maintain that gaining employer participation was a significantly bigger challenge than enlisting school support (Hamilton and Hamilton 1993).

However, most of these efforts are new, and even the longest running of these new work-based learning programs have been in operation for only three years or less. Thus, it may be premature to draw conclusions about large-scale employer involvement in work-based learning programs based on relatively short experiences of demonstration programs.

For these reasons, we proposed to contribute to the expanding body of knowledge in the field by providing insight on employer participation from the perspective of long-standing employer-school partnership programs that provide students with substantive work experience and learning at the work site. The basic questions we believed required exploration were:

- What kinds of institutional support, public policies, and practices influence employer decisions about participation?
- What are the most significant factors that impact an employer's decision to participate?
- What are the benefits to the employer for participating?
- What are the characteristics of employers who participate?

What We Did: Study Methodology

The study had several basic components: a literature search; in-person surveys of school personnel and selected employers; a phone survey of a larger sample of employers; and participation in the design of a companion employer focus group project. An advisory group of experts in the field provided oversight and guidance to this study. (See Appendix I for a list of members.) This group helped frame the research design, reviewed the survey instruments, and provided input to this final report.

Additionally, the study is a part of the research program funded by the U.S. Department of Education's Office of Educational Research and Improvement—the National Center on Educational Quality of the Workforce (EQW) at the University of Pennsylvania—and has been informed by the work of related studies funded by EQW. The employer focus groups were conducted in the same cities in which this study conducted interviews and surveyed employers.

The following five metropolitan areas were targeted for participation in the school and the employer surveys (both in-person and by phone):

- Atlanta, Georgia
- Indianapolis, Indiana
- Pittsburgh, Pennsylvania
- Phoenix, Arizona
- Portland, Oregon.

These communities are ones in which EQW is focusing a range of research activities. The mix of industries within these metropolitan areas provides a fairly representative sample of the size and types of firms within the American economy.

Survey information from two additional sites—York, and Harrisburg, Pennsylvania—was also included in the analysis. These two sites were first used as test sites for the school and the employer survey collection instruments. However, when it became clear that these sites could add value to the quality and depth of information gathered, they were added to the survey sample.

We relied upon state and local contacts to identify specific school sites to include in the study. As a guide, we asked that our contacts attempt to identify schools with programs that substantially incorporate at least some of these core components:

- the establishment for each student of a training plan that identifies learning objectives and both general work-readiness and specific occupational competencies that the student will acquire
- the provision of close supervision of the student at the work-site
- close and frequent coordination between the school and the work-site
- periodic evaluation of the student's progress in meeting learning objectives
- paid work experience.

It was the last factor—paid work experience—that we considered to be the key trigger, since a central focus of the study is to understand what benefits employers perceived were accrued through participation in a program requiring the payment of a wage. Accordingly, most but not all of the programs studied included the paid work component. It was also determined that the focus should be on work-based programs for students still in high school, since this level of education is the current focus of school-to-work initiatives.

The Schools We Interviewed

A total of 18 secondary schools were included in the survey (see Table 1). The interviews were conducted in-person during the period of February through May 1993, with one exception. Each school site received the school survey instrument in advance (see Appendix 2) and determined the staff who would participate in the interviews. The position of staff who were interviewed varied from site to site, but always included the program coordinator and often included one or more school staff members. Circumstances dictated that one school interview be conducted by phone, supplemented by a school-completed survey instrument and printed material.

The schools represented a mix of both urban and suburban sites. One school located 30 miles outside of Pittsburgh was in an essentially rural area. Comprehensive high schools, full-time vocational technical schools, part-time vocational technical schools and one alternative vocational school were all included in the sample. Student enrollment ranged from a low of 240 to a high of 3,400. The mix of grade levels ranged from 9 through 12 to 11th and 12th grades only. The alternative school was ungraded but accepted students between the ages of 16 and 21 who were previously unsuccessful in a more traditional high school.

Most of the programs that were included in the study were a form of cooperative education, since these are the type of programs most likely to meet the criteria for employer participation. Several other program models that involved substantial employer participation were also included: one financial services academy, one vocational mentoring program, one site which used unpaid internships in connection with 6 of 13 career clusters taught at the school, and one "Partnership Project" designed to address the needs of an at-risk student population.

Table 1. Characteristics of Schools and Programs Studied*

Metro Area	School/School Type	Enrollment	% in Paid Work-Based Program	Program Type	Grade Level for Most Work-Based Program Participation
Atlanta	North Spring H.S./Comp. H.S.[1]	1,000	3.0	Co-op	12
	Therrell H.S./Comp. H.S.	1,150	3.9	Co-op, App.	12
	Milton H.S./Comp. H.S.	1,450	4.0	Co-op	12
Indianapolis	Arsenal H.S./Comp. H.S.	2,200	—	Co-op, Internship	11
	Arlington H.S./Comp. H.S.	1,600	3.5	Co-op	11, 12
	Warren Central H.S./Comp. H.S. (Walker Career Center)	1,900	1.3	Co-op	11, 12
Harrisburg/ York	Dauphin County Vocational Technical School/ Comp. Vo-Tech[2]	780	17.9	Co-op	12
	York County Vocational Technical School/ Comp. Vo-Tech	1,050	11.4	Co-op	12
Phoenix	Maryvale H.S./Comp. H.S.	2,000	5.0	Co-op	12
	Deer Valley Vocational Technical Center/ Comp. Vo-Tech	600	9.8	Co-op	12
	Gilbert H.S./Comp. H.S.	3,400	1.2	Co-op	12
Pittsburgh	Parkway West School/ Part-time Vo-Tech	520	6.7	Co-op	12
	Butler County Area Vocational Technical School/ Vo-Tech	759	1.0	Co-op	12
	Beaver County Area Vocational Technical School/ Vo-Tech	630	1.9	Co-op	12
Portland	Vocational Village H.S./ Alternative H.S.	240	6.3	Co-op	12
	Grant H.S./Comp. H.S.	1,500	4.7	Co-op	11, 12
	Jefferson H.S./Comp. H.S.	1,100	4.5**	Co-op and Fin. Services Acad.	12
	Owen Sabin Occupational Skills Center/ Part-time Vo-Tech	1,000	—	Work Experience/ Internships	11, 12

* Only programs with paid work-based learning
** Co-op only
[1] Comprehensive High School
[2] Comprehensive Vocational Technical School

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The Employers We Surveyed

How We Identified Employers

Each school site was asked to provide a listing of participating employers who could be included in the survey sample. In most cases, the individual schools were able to accommodate our request. However, in Portland and Phoenix the employers' listings were organized on a district-wide basis. In Indianapolis the district maintains an inventory, but the school staff is responsible for developing the list. For these cities the employer listing represented schools throughout the district. Procedures for program operation in these cities were also fairly well-standardized throughout the school district.

How the Interviews Were Done

The vast majority of the employer interviews were conducted through a phone survey. However, in each site, at least two employer interviews were conducted in-person. In sum, 21 employers were interviewed in-person across the five metropolitan areas, including York, and Harrisburg, Pennsylvania. The purposes for these in-person interviews were to enable project staff to:

- Better understand the employers' relationship to school personnel
- Provide a concrete framework for both designing the telephone survey and analyzing the results.

The phone interviews were conducted by the University of Indiana's Center for Survey Research. (See Appendix 3 for the employer telephone survey guide and Appendix 4 for the in-person interview questions.) A listing of 426 employers was provided to the Center for Survey Research. An introductory letter, explaining the purpose of the interview and soliciting firm participation, was mailed to each employer on the list. Pretest interviews were conducted first, and then necessary modifications were made to the survey instrument. The surveys were conducted during the summer of 1993 (see Table 2 for disposition). The average interview length was 34 minutes.

Of the 270 employer interviews, we were able to gather complete survey information from 224 of those sampled. EQW staff analyzed the data using SAS software.

Table 2. Disposition of Employer Interviews

270	Completed interviews
43	Refused to be interviewed (after 2 attempts to convert)
62	Presistently unavailable for interviewing (at least 6 call-back attempts made)
18	Away during the survey period, illness, disability
1	Inappropriate listing
11	Organizations not found or not in business
14	Cases not interviewed at program's request
1	Non-working number
3	Organization listed twice
1	Incomplete interview
426	

What Kind of Employers Did We Interview?

As illustrated, the employers who were interviewed represent all major industry groups. Because the sample size was small, we cannot assert that our sample is representative of the actual composition of firms in each industry in each area. A comparison of the employers we surveyed with national Census Bureau business establishment data suggests that employers in the services and manufacturing industries are over-represented in our sample. However, the rank order of the industries are essentially the same (see Table 3 for that order); of the top five, the only difference is that manufacturing and construction switch places. As might be expected, the largest percentage of employers interviewed was in the service sector. This is consistent with general labor market trends, the kinds of jobs traditionally available for youth, and the organization of the work-based learning programs.

Table 3. Distribution of Employers by Industry

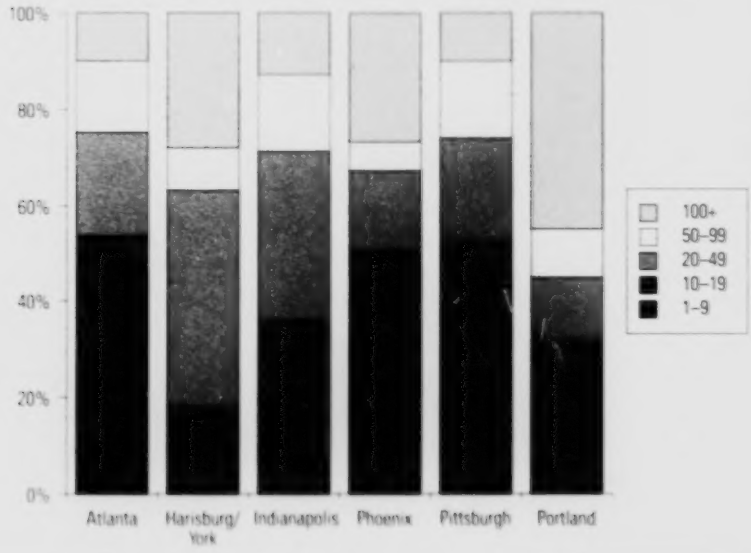
Industry	*Surveyed Employers*	*Percent of Total Sites*
Services	94	42.5
Retail	48	21.7
Finance/Insurance/Real Estate	25	11.3
Manufacturing	19	8.6
Construction	12	5.4
Wholesale	10	4.5
Public Administration	4	1.8
Transport/Communication	4	1.8
Utilities	3	1.4
Agriculture	2	0.9

Employers of all sizes participated in this study. As illustrated in Figure 1, there was some variation across sites in the percentage of large employers included in the study. In Oregon, 45 percent of those included were establishments of 100 or more employees. We do not believe that this percentage is representative of the employer universe that participates in work-based learning programs in Oregon but rather is a function of the sampling. In other sites, large employers represented 20 percent or less of the sample.

At other end of spectrum, very small establishments (i.e., those employing 9 individuals or less) represented about the same percentages as large firms, ranging from about one-fifth to about one-third of the employers sampled.

As part of the interviews, employers were asked about changes in employment levels over the last three years. While it is not surprising that few employers with declining employment levels were among these interviews, it is more surprising that few employers with expanding employment levels were included. Each group was comprised of approximately the same percentage of the sample. The vast majority of employers interviewed reported stable employment levels over the last several years.

Figure 1 Distribution of Work-Site Learning by Level of Employment



4
FINDINGS

How the Work-Based Learning Programs Were Organized by the Schools

At the sites visited, the programs were most typically organized around broad occupational or industry themes. This approach was particularly evident in comprehensive high schools. Although labeled differently, clusters tended to be similar and focused on occupations which have traditionally not required substantial amounts of post-high school formal education. For instance, the most common clusters were around office occupations, health care, retail marketing, and industrial occupations (which included manufacturing and skilled trades). However, the extent to which clusters were offered varied among sites visited.

At Therrel High School in Atlanta, a comprehensive high school, cooperative education was offered for students interested in marketing and business occupations, while at Deer Valley High School in Phoenix, a part-time vocational technical school, cooperative education was offered in health care and "diversified" occupations. "Diversified" is a term used to signify that there is no specific occupational organization; rather, students had the opportunity to receive credit for their work experience in any approved occupation.

Clustering in comprehensive high schools usually meant that students who participated in a co-op cluster also took vocational courses related to that cluster. In some cases, students were re-

quired to have completed at least one elective course in the related field prior to receiving a referral for a related work experience. In theory, this approach fosters matching students with career interests. However, since these courses were tied to "elective" subjects, there was no assurance that a student had given thought to career preferences prior to choosing the elective course or that the choice was made after the student received career guidance.

It is important to note that, in the comprehensive high schools we visited, curriculum is not organized around any focused program of study. Thus, students tend not to be confronted with the need to focus on "what will happen next" in their lives. Because we did not include student interviews as part of this study, there was no way to ascertain whether, in fact, students were pursuing career interests or merely completing requirements for graduation.

Nonetheless, schools did attempt to provide a connection between the workplace and the classroom through related vocational classes. In Phoenix, in addition to any related vocational course, students took a related theory class. This course stressed job-readiness and other generic job skills to assist the student in successfully completing their work experience.

Because vocational technical schools are organized around occupational themes, there was a greater likelihood that students' work experiences were directly related to their career interests or majors. For instance, classes at the Sabin Skills Center in Portland were organized around 13 occupational clusters. Six of these clusters included unpaid, short-term internships as an integral part of the program of study. Students completed several nine-week rotations with employers in occupations that related directly to their field of study. Similarly, students in the York County and Dauphin County comprehensive vocational technical schools were referred only to cooperative education work placements that related to their cluster of study. In the Atlanta sites each of the schools were participating in a state-defined program that includes government-supported, paid work-experience for individuals who are two years behind in grade level. There is a clear distinction between job placement services for students being paid by the employer and those being paid by the government: prior course work was required for those participating in most of the co-op placements and there was no such criteria for those in the "remedial" program.

How Were the Work-Based Learning Programs Administered?

At each school site, school staff were assigned responsibility for administering the work-based learning programs, so that individuals within the school district were responsible for all aspects of the employer partnership, including work-based learning. Unlike some of the newer youth apprenticeship models, in which a third party handles much of the employer-school linkage activity, related activities such as employer recruitment, student referral, and monitoring of the work experience were all performed by school personnel.

For many of the school staff assigned to the task, administering these programs was only a part of their jobs. In a number of sites—typically the comprehensive high schools—the staff were teachers who also shoulder responsibility for teaching the vocational classes. In Atlanta, some accommodations were made by extending the teacher's paid contract time by one month and by longer paid hours each school day.

In some sites, the staff also had responsibility for administering other special, school-based programs, typically ones targeted to disadvantaged students. For example, the position title of the cooperative education coordinator at one of the part-time vocational-technical schools is "Special Population Coordinator."

In Phoenix, the cooperative education position for school teachers comprise only half of their time. In addition, these teachers conduct the related theory and vocational classes in their area of expertise. However, within the district there are full-time cooperative education positions dedicated to working with the larger employers who recruit students from throughout the school district. These positions coordinate recruitment and referrals from high schools throughout the District. Once students are placed, the home-school teacher is expected to monitor the students' work performance.

In Portland, two of the comprehensive high schools visited shared one teacher coordinator. This teacher had access to a centralized listing of employers to help make referrals and entered all job placements in the centralized data base. The number of students involved in cooperative education fluctuates over the course of the school year, but, on average, this one individual manages a case load of about 140 students, divided between the two schools.

In contrast, at the comprehensive vocational technical schools in York and Harrisburg, each school has two full-time cooperative education coordinators whose sole responsibility is administering all aspects of the program. Each of these individuals manages a case load of about 55 students.

How Were Employers Recruited?

From the employers interviewed, we learned that employers—including larger firms—mostly take only one or two students at a time. Only a very small percentage of employers take four or more students at a time. Similarly, employers—including the larger employers—tend to form partnerships only with a single school.

Given the limited time most of the school staff had available for employer recruitment and the fact that most employers participate with only one or two students at a time, finding suitable job slots for students would seem to be a significant problem in administrating these programs. In fact, this wasn't necessarily the case. School staff used a variety of methods, mostly informal, to identify employers for possible referral. School staff across all sites maintained a roster of employers whom they could solicit. The listing was an inventory of employers who had participated at some time in at least the last several years. School staff said that about half of the employers on this list participate every year.

Responses from the employer interviews tended to support the school staff's perception of a high turnover rate among participating employers. Employers were asked specifically how many years their firm had participated in this partnership program. Of the 224 employers interviewed, 196 employers, or about 88 percent, actually participated in the current school year. Of the 196, about one fourth were participating for the first time.

Word of mouth, telephone, and in-person contacts were the means most often used to identify employer referrals. In some cases, the students found the job on their own and then worked with school officials to receive cooperative education credit for the work experience. This was particularly likely to occur in those programs that were not organized around a particular occupational cluster or program of study.

One school district did have a centralized employer recruitment effort. In Portland, the district coordinator for cooperative education indicated that during the 1991–1992 school year the district had a position dedicated to employer recruitment. She felt that this position had been effective, indicated by the drop in the number of available employer placements during the next school year after the recruiter had left (because of budget problems the position wasn't refilled).

Across the sites, school staff tended to indicate that employer recruitment was not a significant problem and that there were generally enough employer slots for the referral of eligible students. At a suburban Atlanta school in a tight labor market area, one of the teachers said that if the student "has a pulse" and can be counted on to appear when expected, the employer will take them upon referral of the teacher. While confirming that he had few recruitment problems, a coordinator in suburban Indianapolis indicated that continuity was a problem: turnover of employers and of their supervisory staffs made it difficult to improve the quality of placements by teaming students with experienced employers and supervisors.

One of the Phoenix schools we visited did have employer recruitment problems. The coordinator reported that hospital placements were difficult to procure because hospitals in the area would not hire anyone under the age of 18. There is also a strong tradition within the health care industry of cooperating with accredited educational agencies in the training of students through the use of unpaid internships through post-secondary institutions, which no doubt influenced the Phoenix hospital recruitment policies for entry-level workers.

We found additional exceptions at the two part-time vocational schools outside of Pittsburgh. At both schools, staff indicated that the poor economy had resulted in a decline in employer slots. However, at both of these schools, the cooperative education positions were only part-time and, consequently, very little time was devoted to employer recruitment. These part-time schools seemed to exhibit a reluctance to release students for cooperative education placements, because they would not be enrolled in any vocational courses. All the students' course work would be in academic subjects at their home high schools. In one school, the coordinator stated a belief that the student would learn more in the vocational class than at the work site.

How Were Students Selected for the Work-Based Learning Programs?

In some areas, difficulties in student recruitment overshadowed problems with employer recruitment. The schools visited tended to have basic entry requirements for participation in the program. Depending upon the school, these requirements served to limit the number of students in the program, even when the requirements seemed rather minimal.

In most schools, only seniors enrolled in the work-based components of these programs. A number of school staff indicated that the basic requirements for graduation precluded students from having the time to participate during school hours. In Portland, 11th-grade students were eligible to participate in cooperative education placements but only after school hours. Only students in the 12th grade were eligible for release from school. In Atlanta, 11th grade students were theoretically eligible, but in practice class schedules precluded students from participation until the 12th grade.

Students at the end of the 11th grade or at the beginning of the 12th grade can normally apply to participate in these work-based learning programs. For the Financial Services Academy at Jefferson High School in Portland, students enter in the 9th grade (although the work experience component doesn't begin until the summer between the 11th and 12th grade) after applying and successfully completing a rigorous selection process.

In Phoenix, only students "on track to graduate" may participate in cooperative education. While this seems like a minimal requirement, cooperative education coordinators indicated that it very much limited the pool of applicants, so that in some years it was difficult to recruit enough students for the required related theory class.

In Indianapolis, most coordinators tried, by reviewing students' academic and disciplinary records, to screen students to assure that they would have few problems at the site. This tended to keep students with less than a "B" average from receiving a placement. Interestingly, the one coordinator who did not screen in this way reported that problems often occur with students but felt that it was the coordinator's role to provide placements to those who needed them.

In other sites, students were required to have maintained a specified grade average (usually a "C"), have good attendance records, and receive the recommendation of their vocational edu-

cation teacher. Students were eligible for both course work and internships at the Sabin Skills Center's Applied Information Systems Program in their junior year upon completing a keyboarding class (or demonstrating the ability to type 40 words per minute), having a "C" or better in English, and expressing interest in business office careers.

How Was the Work-Based Learning Structured?

In essence, work-based learning may be distinguished from work experience or a paid, part-time job by the structure surrounding the experience and how it relates to the student's classroom studies. Structure is imposed by procedures and forms that govern the work site placement. Typically, these procedures and forms are district-wide and include:

- a formal training agreement that outlines roles and responsibilities of the student, the school, and the employer and is endorsed by all parties, including, in some communities, the student's parents
- a training plan that identifies learning objectives and/or competencies the student should acquire
- a formal process, usually a form, for employers to evaluate the student's performance on the job
- regularly scheduled on-site monitoring visits to the employer's place of business.

Table 4 illustrates required procedures for each school program. Students commonly provide some kind of feedback to the school. They usually must report on the hours they worked and may also be required to, in some form, summarize what they did or what they learned. For example, industrial cooperative education students at Gilbert High School in the Phoenix area complete a weekly report that includes hours worked and asks the students to relate any problems that could be addressed in class as well as to identify new learning and related studies. At Walker Career Center in suburban Indianapolis, marketing co-op students write a brief narrative about their work experiences for the week. These "journal entries" help the coordinator keep up-to-date on how the placement is working.

While these forms and procedures are prescribed, school staff who are particularly strapped for time are not always able to follow established methodology. In several sites, those interviewed

Table 4. Features of Work-Based Learning Programs

School	Signed Training Agreement	Training Plan	Formal Evaluation	On-site Monitoring
North Spring High School	X	X	–	X
Therrell High School	X	X	–	X
Milton High School	X	X	–	X
Arsenal High School	X	X	X	X
Arlington High School	X	X	X	X
Warren Central High School (Walker Career Center)	X	X	X	X
Dauphin County Vocational Technical School	X	X	X	X
York County Vocational Technical School	X	X	X	X
Maryvale High School	X	X	X	X
Deer Valley Vocational Technical Center	X	X	X	–
Gilbert High School	X	X	X	X
Parkway West School (Co-op)	X	X	X	X
Butler County Area Vocational Technical School (Co-op)	X	X	X	X
Beaver County Area Vocational Technical School	X	X	X	X
Vocational Village High School	X	–	X	X
Grant High School	X	–	X	X
Jefferson High School (Financial Academy)	–	–	–	–
Owen Sabin Occupational Skills Center (Internship)	X	X	X	X

NOTE: For schools where there is more than one type of program coordinator—co-op, academy, etc.—the program in parentheses indicates the one for which features are listed.

admitted that they really did not have time to make employer site visits or to complete individual learning plans for all students.

Another related indicator is the frequency of personal contact between school staff and the employer. Again, there was a dichotomy between school procedures and employer responses. All sites had procedures which established a frequency and method for contacting the employer—typically in-person at the work site—to assess the student's progress at the work site. Employers, when asked how often school staff contacted them either by phone or in-person, provided a wide range of responses. Most employers (93 percent) reported that school staff had contacted them at least once during the school year. However, almost 20 percent of employers reported speaking with school staff only once or twice during the school year. Another 25 percent reported three or four contacts during the school year, with the remaining employers reporting numerous—five or more—contacts between them and the school.

Responses from the employer sample seemed to reinforce the information we gathered from school staff. Employers were asked a series of questions that related to the structure of the work site experience. Questions were asked about the use of a signed training agreement, a written training plan, formal evaluation of students' experience as well as less formalized arrangements such as assignment of a mentor to the student and task rotation.

As illustrated in Table 5, employers were for the most part aware of their role in formally evaluating the student's performance for the school. While the percent of positive responses varied considerably across sites, in general there was a higher percentage of positive responses for the less formalized arrangements, such as provision of a workplace mentor and periodic rotation of assignments and tasks. When asked about formal training agreements and especially training plans, the percentage of positive responses was considerably smaller. For example, although more than 80 percent of the programs reported having a written training plan, an average of 56 percent of the employers responded positively to a question about whether the school had such a plan for each student.

The employer responses and the remarks of school staff suggest that for many students, the placement provided them with work experience but not a lot of formal on-the-job training. Not surprisingly, the interview data suggests informality in the work site ex-

Table 5. Employers' Understanding of Work-Based Learning

School	*Atlanta*	*Harris-York*	*Indianapolis*	*Phoenix*	*Pittsburgh*	*Portland*
Does the school require the students to sign a training agreement?	73.0	100.0	84.0	50.0	82.4	72.0
Does the school have a written training plan?	58.8	66.7	50.0	55.0	53.8	63.2
Do the students have a workplace mentor?	95.2	100.0	88.5	92.3	90.6	85.2
Are the students rotated to different positions or tasks?	70.5	90.9	75.0	84.0	81.5	64.0
Is there a formal method for evaluating the students' work performance for the schools?	90.9	90.9	100.0	88.5	83.6	81.5

perience is more prevalent among smaller employers. While more than half of employers with 50 workers or more reported that the school used a written training plan, less than 40 percent of employers of 19 or less reported doing so.

Attitudes Surrounding Employer Participation

Why Do Employers Participate?

Employers to whom we spoke gave these, and many other, reasons why they initially decided to participate in a work-based learning program:

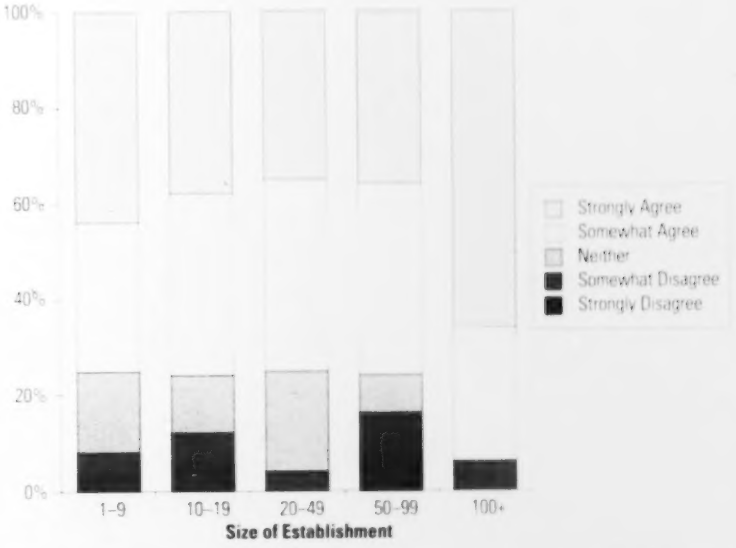
"Community Participation"
"I like to help young people."
"It makes the company look good."
"It's a good recruiting tool."

The two overarching reasons why employers participate are to perform a community service or to recruit entry-level workers. The employers in our survey overwhelmingly agreed that these statements reflected their viewpoints. Employers of all sizes tended to "agree" or "strongly agree" with both of these rationales. It should be noted that when asked specifically if any students continued to work at the firm after the program ended, 129 of those interviewed provided an affirmative response.

An anecdote from one of the in-person employer interviews helps to illustrate employer views on the recruitment of new workers. A manager of a large car dealership service center reported that his organization had been participating in co-op education programs for more than 10 years. He indicated that the company benefited from interacting with students when they first start working so that the company can mold them and train them. In his view, more experienced workers—even those with occupational credentials—always brought with them negative "baggage." These statements are quite an interesting contrast to the more prevalent employer view of not wanting to hire workers who do not have work experience.

As illustrated in Figure 2, employers, particularly those from larger establishments, tended to agree that they were motivated by an interest in performing a community service. In fact, large employers are generally most concerned about actively project-

Figure 2 Employers Participating to Perform a Community Service By Size of Establishment



ing a positive image throughout the community. This is not the primary motivation for all large employers, however. In one of our in-person interviews in Atlanta we were told of the Federal Aviation Administration's experience with a large, long-term co-op program that has been the source of 25 percent of their total regional workforce for several years. Over its 20 years of existence it has been evaluated several times and found to be cost-effective as a recruitment vehicle because it decreases turnover.

When employers were asked to elaborate on their responses, the more specific motivating factors became obvious. A sizable percentage, more than 25 percent of those expressing views, were quite forthright in saying this partnership was a way to fill part-time positions. A few even said that this was a way to get good, lower paid part-time help.

Clearly for most employers, the prospect of financial assistance was not a motivating factor. Very few of the employers interviewed had received any form of financial aid. No employer reported receiving any wage subsidy, and only a few took advantage of the Targeted Job Tax Credit (TJTC).

Are Students Viewed as Productive Workers?

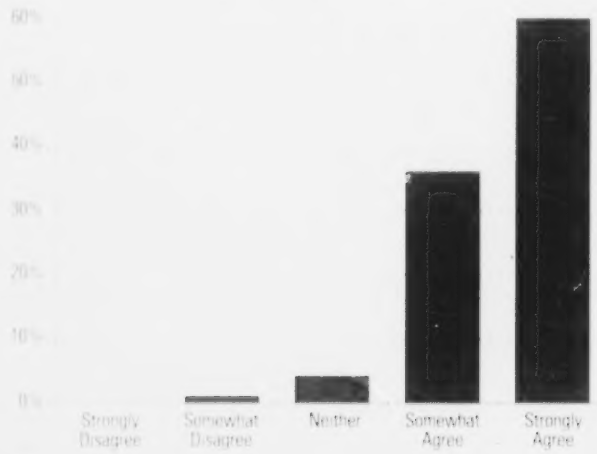
The employer who made the following comment expressed the sentiments of the overwhelming majority of employers included in our survey:

> *"Initially we probably break even,*
> *but as the student progresses*
> *then the company starts to make money."*

Ninety percent of the employers surveyed said they either "agree" or "strongly agree" that students are productive workers (see Figure 3). Employers indicating that they were well-satisfied with the students they hired reinforces this view.

When asked whether they were satisfied with the school's ability to provide students with the skills they needed, 86 percent of the employers indicated that they were satisfied. Seventy percent of the employers reported no significant problems with the students. Among those employers who reported that there were problems with the students, most felt the school had taken steps to satisfactorily resolve the problems.

Figure 3 Employers Agree: Students Are Productive Workers



Why Don't Employers Do More?

Employer responses indicate that these arrangements are a "good deal" for the employer. Because schools apply program-entry criteria to students (some more rigorous than others), they are acting as screening agents to send employers students with skills who can become productive workers for the employer. The screening function that the school performs provides employers with a service that they would otherwise fulfill themselves or hire an employment services firm to undertake.

Given that employers believe these programs are a good "deal," we wondered why employers don't take on more students. In fact, a surprisingly high percentage of employers expressed both a willingness and an expectation of expanding their participation. When asked whether they would consider expanding their participation in this program over the next two years, about 45 percent of participating employers responded positively. Of the 55 percent who responded negatively, the most likely reason was simply the lack of work available.

Interestingly, issues that are frequently raised as likely impediments to the expansion of student work-based learning programs—child labor law, workers' compensation, and health and safety—were of concern to relatively few employers. The productivity of the students was of consequence to about one-third of the employers who had decided not to expand their participation.

Why Don't Employers Participate?

Of the 28 currently nonparticipating employers in our survey sample who had previously participated, only two employers expressed dissatisfaction with the school program. Two employers (possibly the same ones expressing dissatisfaction with the school program) expressed dissatisfaction with the students' work performance. The remaining employers either could not give a reason for nonparticipation or indicated that the school did not have a student available to refer (11 responses). Most of the employers (26) said they were either "very satisfied" or "somewhat satisfied" with their experience with the school.

One interesting slant on this issue came from one of the in-person employer interviews—a large banking corporation that took on approximately 70 students each year. Among those interviewed was a former co-op student with this bank who was now pursuing a career with them. Over the last several years, she had worked with co-op students. She expressed the view that the stu-

dents now weren't as well prepared as she and her peers. One specific complaint was that the students "lacked initiative." She also indicated that the coordination with the teacher could be improved, and that she seldom had any contact with the school. In her view, the bank would continue participation regardless of the quality of the students and the program because the bank felt a commitment to the community. It should be noted that her rationale does not reflect the consensus of the other in-person employer interviews, who on the whole were positive regarding the students and the programs. There is another set of views concerning why employers do not want to participate in work-based learning programs.

EQW, in co-operation with IEL, conducted focus groups of employers who had not participated in these kinds of partnership programs. These focus groups were held in five of the same sites as this study—Atlanta, Indianapolis, Pittsburgh, and Phoenix—along with three additional sites: Cleveland, Ohio; Eugene, Oregon; and Ithaca, NY. Each was composed of representatives from between seven and twenty firms, both large and small. Their attitudes towards students and towards participating in work-based learning programs contrasted sharply with the employers in our sample, including the small number who had not participated during the last school year.

Those employers who attended the focus groups—almost exclusively employers who have never participated in a work-based learning program—expressed extremely negative views about both students and high schools. According to these employers, "Young people lack discipline; they expect to be catered to; they don't want to do the dirty jobs; they don't respect authority" (Zemsky 1994). Opinions were also expressed about the students' basic skills: "Young people lack communication skills; they are neither numerate nor literate; they can't make change; they don't understand the importance of providing customer service" (Zemsky 1994).

It is not possible to reconcile these two "polar extremes" regarding employer opinions from the available data. Clearly, many of the employers who participated in the focus groups have had experience with young workers, perhaps hired through newspaper adds for "youth labor market" jobs, which are almost by their nature designed as low wage high turnover positions. In contrast, the findings from the structured surveys with employers who have participated in some form of program suggest a "try-it-you-will-like-it" response. Time and more experience will have to help sort out this obvious paradox. It is clear that perceptions matter and the

perceptions from the focus groups cannot be ignored by schools and organizations who need to develop school-to-work programs.

Pulling It All Together

The information gathered from the 18 school sites, combined with the employer interviews, provides a wealth of information about how these work-based programs operate and about employers' attitudes towards them. We have laid out these findings in detail above. The following is a summary of some key points that emerged from these findings.

School Sites

With respect to the school sites, we learned that:

- in addition to programs including work-based learning, each school tended to have several occupation-focused programs without a work-based learning component, yet the programs are not inter-connected
- the occupational clustering was more likely to be a function of teaching-staff availability rather than any deliberate analysis of the surrounding labor market
- the programs are institutionalized within the school environment but in most sites are not a significant priority, as evidenced by the resources allocated for them—indeed, they seem to have survived years of inattention.

School-to-Work Relationships

With respect to school-to-work relationships, we learned that:

- the extent to which students learn occupation-specific skills varies greatly among work sites;
- despite the lack of organized and focused employer recruitment efforts, the schools are generally able to place all participating students in these small programs
- the importance of the student screening function performed by the schools should not be undervalued
- there was greater assurance that the work-based learning is tied to the student's career path in the comprehensive vocational-technical schools or in an occupation-focused program
- as programs become well-established, employer recruitment becomes less of an issue.

Our findings thus confirm the findings of the 1977 study on employer recruitment in post-secondary co-op programs we cited earlier. It may well be that the newer forms of work-based learning programs, which have indicated some difficulty in finding employers, simply need more time.

Employers

With respect to employers, we learned that:

- contrary to popular belief, employers participating in these programs are pleased with the quality of students
- employers believe the students are productive workers
- while community service (and, perhaps, being perceived as performing a community service) is a strong motivation for employers, the significant business operations reason—recruitment of entry-level employees—is at least as strong a motivation
- many employers do not understand the elements of work-based learning
- very few employers cite child labor laws or worker compensation as issues affecting their decisions about participation.

5
IMPLICATIONS FOR GOING TO SCALE OR WHAT DOES ALL THIS MEAN?

"We need more programs like this for young kids. I think all (high) schools should participate in them"

—an Indianapolis employer

We are, as a nation, willing experimenters; there are always demonstration projects underway somewhere in our schools, such as current youth apprenticeship and career academy projects. When federal support is provided, even for a limited amount of time, there will most often be a program effort left in place, as is the case with the cooperative education program. We do not lack examples of good programs and proof that it is possible to engage employers in some form of school-to-work collaboration. All over the country there are small programs which stand as testaments to this fact.

Yet, in the end, the central question becomes: "Can we go to scale?" This concern returns us to one of the major concerns of the authors of *The Forgotten Half*. They, as well as others, have made the challenge to school boards, school teachers, administrators, state officials in several different departments, employers, employer organizations, and employee organizations to alter almost one-hundred years of practice. The challenge is to provide a substantially different mode of learning for at least one half of our young people—not just one or two percent. How to "go to scale" is the focus of our recommendations.

The recommendations hinge on the role of the employer and are geared to help:

1. *Federal, state, and local program implementors*—since the answer to the question of going to scale is, to a large degree, dependent upon the development of a new "mainstreamed"

education and training infrastructure, which includes a permanent and substantial role for employers.

2. *Employer-based organizations*—since it will be necessary to create efficient and effective methods to support the expansion of work-based learning opportunities for students.

We have recognized from the outset that other researchers and those involved in demonstration projects are all contributing to the enhancement of the knowledge base about how to improve school-to-work transition opportunities. We recognize the critical contributions that unions, community-based organizations, employment and training providers, and others must play in the development of a "full scale" initiative. Yet, our focus of study—the employers and the organizational relationships between them and key educational institutions—remains at the core of determining success for going to scale. It also remains the biggest "if."

6
RECOMMENDATIONS

Much of what follows is not bold, glamorous, or particularly difficult to conceptualize. Much can be achieved through a solid strategic planning process which engages all of the stakeholders in the process, not just through endless meetings but through a process that efficiently involves individuals and organizations. For the system to go to scale, this process needs to recognize that changes must occur in schools, local school districts, local community collaborative organizations, employer organizations, and multiple worksites across the country. Much of this process can be categorized as recognizing the need to change the "habits of the mind."

One broad recommendation is to *construct the program to support the roles of all the critical players.* Implementation is ultimately a local happening, but this does not mean all implementation strategies are best organized only at the local level. The recommendations in this section are designed to recognize those functions that require external support as well as those that must occur within local schools and worksites.

How Public Institutions Should Foster and Support Employer Involvement in Work-Based Learning

In order to create for the link between the workplace and the classroom, teachers and school administrative staff need to be

involved in work-based learning program design and delivery. The question is: "What are the most effective and efficient ways for this to occur?"

Build a national support structure to develop materials for use in classroom and work-site.

Curriculum frameworks are not developed most cost-effectively on a school-by-school basis, on a district-by-district basis, and in this arena probably not even on the state level. We should take a lesson from academics (e.g., mathematics and science) and develop national voluntary content standards and suggested curriculum frameworks. National teacher and administrator professional membership organizations should be asked to work with employer groups to assist in the identification of content standards and "best practices." Such frameworks can then be adapted for use by the states and localities. A beginning step to develop this capacity would be for the federal government to support collaborative projects between skill standards projects and organizations linked to the classroom. This support would start to build the curricular frameworks and instructional materials in broad occupational clusters. Without such an effort, the linkage to create portable credentials referenced in the new legislation will languish.

Take the learning plan seriously; focus on workplace requirements.

It was clear from the majority of employer responses to this survey that training plans were not considered to be a serious tool. It was also clear that, with a few exceptions, schools did not use the plans as an instructional tool. This represents a lost opportunity and is an example of the disconnection between the workplace and the school.

Each student, regardless of academic ratings, eventually needs to learn several categories of skills within a hierarchy in order to be successful in the labor market. These include learning how to apply what is imparted in the classroom in a work setting; cognitive abilities (e.g., quantitative and abstract reasoning), workplace basic skills, cross-functional skills (e.g., information gathering, communication, problem analysis, organizing and planning, coordinating with others), occupation specific skills and knowledge, and the honing of

personal qualities (such as acting responsibly). These various categories of requirements are reported to be essential in high-performance work-settings and increasingly considered to be essential skills that add value and bolster productivity within the economy as a whole.

It is easy to say that learning plans should be taken seriously, but history suggests this will not happen without sustained assistance from several quarters. Actions are required at all levels of the learning enterprise for this to become a reality. A national support strategy can help launch this effort. For example, the federal government can start the process by pulling information together regarding "best practices," by synthesizing research from an array of sources about skills hierarchies, by focusing a portion of federally sponsored conferences on how to translate workplace requirements into learning plans, and by ensuring that a portion of the technical assistance support contracts focus on this need. These are only beginning steps; the states must take seriously the effort to make learning plans central and viable within the school-to-work initiative.

Establish, through wide consultations, the purpose and uses of the learning plans.

States are in a good position to take the lead in framing the critical components of learning plans, which could be constructed around a common core of knowledge of both academic and skills standards. This framework should include the skills required in all work settings and an articulation between and among the different types of education and training institutions.

Clearly, local adaptation should be encouraged—but not so that teachers simply make isolated decisions regarding the purpose and use of a structured learning plan for each student. Results of an employer's assessment should be shared with all faculty in a school, not just one classroom teacher. Summaries and analyses need to shared with the local school board and other local stakeholder organizations involved in the school-to-work effort. The purpose should be to create the right information base and to promote a continually improving management approach in the organization of the school-to-work initiative.

Recognize the legitimacy of gradations of learning opportunities in different types of sites.

We believe that large-scale employer participation is achievable, but not if it is based on an inflexible design. It is unrealistic to anticipate that the first work-site placement for every young person will be in an occupational area in which the individual will remain for the rest of his or her working life. In some cases, job rotation may not be possible—particularly if the firm has only a few employees. Also, it is not realistic to assume that every work-site learning opportunity should provide all of the ingredients of a mature, structured learning program for occupation-specific training. Occupation-specific training at the high school level will be appropriate for some industries; for others, this level of training may need to be delayed until the third or fourth year of participation.

The need is to think through what needs to be learned, how knowledge development needs to be sequenced, and how the schools can be organized to assure this occurs. The companion effort of developing skill standards for a wide array of occupations should help inform this critical component of the school-to-work initiative.

Support the screening and oversight roles.

One of the key reasons employers choose to participate in work-based learning programs is because they value the screening, recruitment, and oversight roles the school staff performs. As one employer said about her experience with work-based learning:

> *"Our experience with this student has been outstanding and I believe it is because of the school monitoring. In the past, we had students who were not in this type of program and the results were very poor performance, which makes me believe the structure of the school involvement greatly enhances the students' ability to interact with people and to follow directions and complete the work task."*

Many more teachers and school counselors need to be exposed to the techniques and criteria of this critical function. Teachers need to be considered a "linchpin" in the process of recommending students for participation in the program. This

key role helps engage the teacher in linking the events of the classroom with the learning process occurring in the work site.

Recognize the valuable commodity of time.

This will be one of the toughest problems with which educators will need to grapple. Time is limited by state graduation requirements mandating an explicit number of courses; specifications on class scheduling dictated by either state or district regulations; discrete classes for given subjects instead of a curriculum that integrates academic and applied learning opportunities across major disciplines; and the powerful "habits of the mind" of individual teachers. These will need to be reconsidered in order for "scale" to be addressed.

Both state and district officials need to take strong leadership roles if the current situation—postponing the opportunity for students to participate in a work-based learning program—is to be reversed. Schools must be encouraged to create flexible scheduling opportunities for students.

Local school boards in concert with community college boards should hold joint focus groups with employers and staff involved in work-based learning programs.

Many program staff expressed substantial frustration regarding disincentives built into the work rules of the their own education institutions. Many said the internal operating rules of the schools generate impediments to promoting and expanding work-based learning programs. Local policy-making bodies should listen to their staffs and to employers who have been involved in school-sponsored work-based learning programs to determine what changes are needed, from both perspectives, to promote increased penetration of this form of learning. It is suggested that local community college boards also participate in these focus groups in order to develop integrated curriculum and to articulate agreement strategies.

Clear out the underbrush.

There is a common perception that legal impediments in the form of child labor and other laws prevent employers from participating in work-based learning programs. We did not find this to be a notable barrier in any of the communities in this study. However, there is value in states conducting a

systematic review of laws, regulations, and most specifically operating procedures that may hinder easy participation of employers.

Support staff development of total school staff.

The integration of the curriculum—across all the disciplines—must occur. Time must be allocated for the staff to work towards total integration of curriculum, particularly if "going to scale" is to become a reality. Also, teachers and administrators themselves need opportunities for internships in business settings.

Actions to Recruit Business and Structure Work-Based Learning

Schools cannot be solely responsible for developing ways to recruit employers and link students with employers. The coordination that will be required among schools, employers, school systems, and intermediary organizations is already challenging, but as new school-to-work systems move to scale these challenges will grow.

Keep it simple.

The actual transaction processes between the individual employer and the school-to-work public "agent" cannot be cumbersome, time-consuming, or encumbered by "red tape." This does not mean, however, that there are not complex, "back-office" operations necessary to make this possible. Engagement of the employer community is needed at several different levels.

Seek support from national organizations to help explain career opportunities as well as the requirements of industries and their key occupations.

For the development of common occupational skill standards as well as an understanding of "all aspects of the industry," national organizations offer a good starting point to help create the strong employer-based network needed to help promote the school-to-work initiative overall. They can help identify the characteristics of a top-flight work-based learning program. They can be involved in the development of cur-

riculum and instructional materials that have the endorsement of their industry.

Use employer-based organizations—create them if necessary.

National organizations can only provide general information and support. Adaptation and "filling in the blanks" will need to be accomplished within each state and its local communities.

State and or local employer-based organizations can help in a variety of ways, including the recruitment process. They can help coordinate the development of curriculum for use in both the schools and work sites; they can help establish internship sites for school staff; they can help establish articulation standards for technical preparation programs between high schools and post-secondary institutions and work-site training (formal apprenticeship) programs; and they can act as holding companies and fiscal agents for a variety of functions as necessary for the "back office" operations to run smoothly.

Be deliberate—cover all industrial sectors.

It is very striking that several industry sectors were substantially under-represented in the communities; most notably, public administration (including educational institutions and the private non-profit community), finance/insurance/real estate, transportation and communication, and utilities are underutilized as potential sites. At a minimum, communities need a database to organize employer contacts. This data must cross individual school and, at times, district boundaries.

Be informative—in concert with local business organizations develop information materials.

A specialized "yellow pages" can be used by all school districts and other training providers in a labor market area to help reduce the contact cost. Types of jobs and sizes of firms in the labor market area—along with names, addresses, and telephone numbers—would be very helpful to staff responsible for developing work sites for students. The first task would be to decide which organization(s) should be responsible for developing and maintaining the yellow pages. These materials could also be used for guidance counseling purposes.

Be inclusive of all sizes of employers.

There was a remarkable number of small employers who participated in work-based learning programs in the communities we visited. Yet, there are costs in soliciting and providing support to this very large group of small employers. Door-to-door canvassing may work in some smaller communities but would not be as efficient in larger ones. Centralized staff could be organized to work with local industry groups as well as communicate—through letters and telephone calls initially—with individual businesses to describe the school-to-work initiative to determine their interest.

Be deliberate in assigning the task for recruiting employers; organize the recruitment of employers through a community-wide network of specialized staff.

Teachers with classroom responsibilities do not have time to recruit employers on the scale required. If necessary, brokers who can cross school district boundaries are needed. These brokers need to be familiar with each school's programs as well as the employers in a geographic area.

Remember success breeds success.

There are a number of satisfied customers of work-based learning programs in the employer community. They need to be used as ambassadors to their fellow employers.

One of the major challenges of the proposed school-to-work initiative is to establish the tie that will bind together the school, the employer, the student, and the multiple funding streams. This is no small task. We believe the best way to tie the pieces together is to focus attention on the development of the sequential learning plans.

Final Observations

The School-to-Work Opportunities legislation—as well as the companion Goals 2000: Educate America Act's National Skills Standards Board and its emerging academic and occupational skills standards—represent a watershed opportunity for America. They are not new programs in the traditional sense of the word. If they are treated as separate categorical activities, then the challenge to "go to scale" will not be realized. Rather, they should

be viewed as providing the "glue money" to build the infrastructure necessary to create the American style of a superior education and training system for all our young people. Building the right infrastructure will take time and considerable effort. It cannot be done unless significant funds are invested in establishing the private sector's capacity to assist the millions of employers in communities throughout the country in becoming the rightful and essential partners in preparing the next generation of skilled workers.

BIBLIOGRAPHY

Bailey, Thomas, and Donna Merritt. March 1993. *The School-to-Work Transition and Youth Apprenticeship: Lessons from the U.S. Experience*. New York: Manpower Demonstration Research Corporation.

Ball, Joseph, Carl Wolfhagen, with David Gerould, and Loren Solnick. 1981. *The Participation of Private Businesses as Work Sponsors in the Youth Entitlement Demonstration*. New York: Manpower Demonstration Research Corporation.

Barton, Paul E. June 1990. "Skills Employers Need—Time to Measure Them?" A Policy Information Proposal. Policy Information Center, Educational Testing Service, Princeton, New Jersey.

Berryman, Sue E. 1990–1991. *Solutions*. Washington, DC: National Council on Vocational Education.

Berryman, Sue E. 1991. "Designing Effective Learning Environments: Cognitive Apprenticeship Models." *Institute on Education and the Economy (IEE) Brief* 1(September):1–4.

Bishop, John. 1985. *Preparing Youth for Employment*. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University.

Carnevale, Anthony P., Leila J. Gainer, and Ann S. Meltzer. 1990. *Workplace Basics, The Essential Skills Employers Want*. San Francisco: The Jossey-Bass Management Series.

Congressional Quarterly Press. 1992. "Youth Apprenticeships: Can they improve the school to work transition?" *Congressional Quarterly* 2(October 24):39.

Economic Development Department, Employment Division, Oregon Progress Board, Workforce Quality Council. January 1993. *Oregon Works: Assessing Training and Work Organization Practices of Oregon Employers*. Salem, Oregon: Economic Development Department, Oregon Progress Board.

Education Writers Association. 1990. *Training for Work: What the U.S. Can Learn from Europe*. Washington, DC: A Report of the Education Writers Association.

Education Writers Association. April 1992. *Hands and Minds: Redefining Success in Vocational Technical Education*. Washington, DC: A Report of the Education Writers Association.

Emergold, David. March 1993. *Making Apprenticeships Work*. Washington, DC: Rand Issue Paper, Institute on Education and Training.

Frankel, Steven, Alan Cohen, and Robert Deane. November 1976. *Cooperative Education—A National Assessment*. Washington, DC: Applied Management Sciences, Inc., for the Department of Health, Education and Welfare's Office of Education.

BEST COPY AVAILABLE

Glennan, Thomas K., with the assistance of Lin Lin. March 1991. *Collaborating to Improve Work-Related Education: Preliminary Lessons from the Field*. Washington, DC: Working Draft, The Rand Corporation for the U.S. Department of Education, Office of Educational Research and Improvement.

Glover, Robert W. 1985. "Collaboration in Apprentice Programs: Experience with In-School Apprenticeship." *1984 Yearbook* (American Vocational Association): 141–149.

Hamilton, Stephen F., and Mary Agnes Hamilton. January 1993. *Toward A Youth Apprenticeship System: A Progress Report from the Youth Apprenticeship Demonstration Project in Broome County, New York*. Ithaca, New York: Cornell Youth and Work Program, Cornell University.

Kazis, Richard. 1993. *Improving the Transition From School to Work in the United States*. Washington, DC: American Youth Policy Forum, Competitiveness Policy Council, Jobs for the Future.

National Center on Education and the Economy. January 1993. *Rochester Area Youth Apprenticeship Model*. Rochester, NY: School-to-Work Transition Initiative, Rochester City School District.

National Child Labor Committee. 1984. *Keys to Cooperative Education Programs*. New York: National Child Labor Committee.

Nothdurft, William E., and Jobs for the Future. 1988. "Youth Apprenticeship, American Style: A Strategy for Expanding School and Career Opportunities." Report of a conference held on December 7, 1988.

Scott, John L. 1993. "Cooperative Education: A Vital Work-Transition Program." Paper presented at the Southeastern Trade and Industrial Education Conference, May 26, 1993.

Stern, David, James R. Stone, III, John Latting, Neal Finelstein, and Gina Martinez. 1993. *School to Work Transition and the Relevance of Vocational Education to Subsequent Employment*. Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

U.S. Congress, Office of Technology Assessment. September 1990. *Worker Training: Competing in the New International Economy*, OTA ITE-457. Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. March 1991. *Combining School and Work: Options in High Schools and Two-Year Colleges*. Washington, DC: Office of Vocational and Adult Education.

U.S. General Accounting Office. August 1991. *Transition from School to Work: Linking Education and Worksite Training*. Washington, DC: Report to Congressional Requester.

U.S. General Accounting Office. March 1992. *Apprenticeship Training: Administration, Use, and Equal Opportunity*. Washington, DC: Report to Congressional Requesters.

William T. Grant Foundation. 1992. *Youth Apprenticeship in America: Guidelines for Building an Effective System*. Washington, DC: Youth and America's Future: The William T. Grant Foundation Commission on Work, Family and Citizenship.

Wills, Joan L., Eric Rice, and Robert Sheets. 1993. *Skill Standards Systems in Selected Countries*, Vol. IV, *Skill Standards in the U.S. & Abroad*. Washington, DC: Institute for Educational Leadership.

Winer, Ellen N., and Kane, Stephen M. 1985. "Employer Evaluation of High School Work Experience Programs." *Journal of Cooperative Education* 1.

Zemsky, Robert. 1994. "What Employers Want: Employer Perspectives on Youth, the Youth Labor Market, and Prospects for a National System of Youth Apprenticeships." EQW Working Paper Number WP22. Philadelphia, PA: National Center on the Educational Quality of the Workforce, University of Pennsylvania.

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APPENDIX 1

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APPENDIX 2

Program/School Survey—In-Person Interview Questions

PART A. School Profile

1. Identify the individuals and their positions who participate in this survey.
2. Obtain printed information that describes the school and its programs.
3. What kind of school sponsors this program?
   - _____ Comprehensive High School
   - _____ Comprehensive Vocational/Technical School
   - _____ Vocational/Technical Center
   - _____ Community College
   - _____ Other
4. How many students and what grade levels does this institution serve?
5. How are students assigned/recruited for this school?
6. Describe the basic academic/vocational education programs provided by this institution (e.g. college prep, tech prep, occupational clusters, integrated academic/vocational programs, vocational programs only).
7. Describe any other education and training programs provided by this institution (e.g. adult education, apprenticeship related instruction, customized training).
8. Describe any significant changes to the school curriculum or its programs that have been initiated within the past 3 years. (For instance, is the school implementing the tech prep program or other means of integrating academic/vocational education).
9. Identify the types and purposes of the school's advisory groups. Is there an advisory group specifically established for the school's work-based learning program?

PART B. Program Profile

(Complete this part for each program that corresponds to employers included in the sample).

Obtain a listing of the employers who participate in this program and any printed material about the program.

1. Identify the type program:
   - _____ coop education
   - _____ academy model
   - _____ other
2. When did this program begin?

3. Why was this program started?

4. Over the last five years how have the following changed:
   a. program design
   b. level of student enrollment (give numbers or range of numbers, including number for this year)?
   c. level of employer participation last five years (give numbers or range numbers, including number for this year)?

5. How are employers recruited to participate in the program?

6. Describe any difficulties that have been encountered in recruiting employers.

7. a. On average, what percentage of employers discontinue their participation each year?
   b. What reasons do they give for discontinuing their participation?

8. Is there an intermediary organization involved with this program, such as a community college or the PIC? Yes/No

   If yes, identify the organization and its responsibilities.

9. How many students participate in this program and what is their age/grade levels?

10. How are students identified for the program? What are entrance requirements, if any?

11. Do students receive any academic or vocational instruction in any other school or institution in addition to this school? Yes/No

    If yes, explain.

12. Explain how students are selected/referred to employers and the role employers play in selection of students.

13. Does the work-site learning/work experience component include:
    ____ a training agreement between the school, the student and the employer?
    ____ a work site learning/training plan?
    ____ assignment of a workplace mentor?
    ____ school credit for work site learning. If yes, how much?
    ____ paid work experience?
    ____ job rotations?

14. How much flexibility does the employer have in designing the work site learning/work experience component (i.e. what are optional components, if any)?

15. If the students are paid, what is their hourly rate and what is their work schedule? Does this vary by employer?

16. Do the students receive any special preparation before they begin work? If yes, explain.

17. How is the work site learning/work experience related back to the school curriculum?

18. Describe the process and frequency for evaluating a student's work performance and progress in meeting work site learning objectives, including the roles of the school and the employer.

19. What kinds of problems have there been with student recruitment, work behavior, and work performance? How frequently do these problems arise?

20. a. How are problems with student recruitment, work behavior or performance resolved?

b. Have both the school and the employing organization been satisfied with this process?

21. Describe any assistance the employing organization received in training its own employees to supervise, evaluate or instruct students.

22. Do employers receive any financial assistance (such as wage subsidies)? Yes/No

If yes, identify the type, amount and source.

23. Are there any legal constraints such as health and safety laws/regulations or child labor laws that impede your ability to increase participation in worksite training programs? Yes/No

If so, specify which law or regulation and explain its impact.

24. If you had complete flexibility to change this program, what changes would you make?

APPENDIX 3

Employer Telephone Survey Guide

<Q1> A high school in your area gave your name and number to the Institute for Educational Leadership as an employer that has worked with a local high school. For this study, we look at a range of programs that link employers and high schools to provide students with work site learning experiences. So that we can ask you questions that match your particular program, I'm going to describe the general type of program we are looking for in this study. ➡

<qa> We are interested in any program where there has been some continued contact between your firm and high school personnel. This includes telephone or in-person contact, and paperwork or informational materials. These programs are sometimes called "partnerships." Partnerships vary in the amount of structure they provide. A partnership can involve a non-paid internship or a paying job and can vary from a few days to a full year. ➡

<qb> Your firm's work with a high school is a partnership if it involves any one of the following:

one - the school requires students to sign a training agreement, OR

two - your firm or the school has a written training plan for the student, OR

three - there is some formal way that your firm lets the school know how you evaluate the student's workplace performance.

In the past three years, has your organization participated in a program with a local high school that involved at least one of these items?

<1> yes <5> no <8> DK <9> RF ➡

<dsc> Would you briefly describe the partnership? If your organization has been involved with more than one type of partnership in the past three years, please describe all of them. ➡

<odsc> As I mentioned before, your firm was provided as an employer who has worked in some way with a local high school. Could you tell me in what way, if any, your organization has been involved with a local high school at anytime in the past several years? ➡

<TCBY> Thank you for your help with this study. We may need to call you back in the future to ask some further questions. ➡

<newn> I will ask a number of questions about your organization. Is there another name that you use to refer to it?

<1> yes <5> no ➡

<ORGN> What name do you use?

_____ ➡

<q2> I will list several types of training that some firms offer to new employees. Please tell me if your organization currently provides each type of training to its new employees.

First, orientation training. Orientation training means familiarizing new employees with the formal and informal policies and practices of your workplace, such as recording their hours, the attendance policy, and taking breaks.

Does your organization provide orientation training to its new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11a> About how many hours of orientation training are currently offered for new employees?

<0> none <1-995> hours <996> 996 hours or more

VOLUNTEERED

<x> can't estimate/ <998> DK <999> RF

depends/varies (specify) _____ ➡

<q11b> Does your organization use on-the-job training to train new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11c> Does your organization use registered apprenticeship programs for new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11d> Does your organization use vendor-provided or other purchased training programs for new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11e> Does your organization use any industry association-provided training for new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11f> Does your organization have written on-the-job training plans for new employees?

<1> yes <5> no <8> DK <9> RF ➡

<q11g> Does your organization contract with local technical schools or community colleges for customized training programs?

<1> yes <5> no <8> DK <9> RF ➡

<q11h> Does your organization employ its own full-time trainers?

<1> yes <5> no <8> DK <9> RF ➡

<q11i> Does your organization provide tuition reimbursement for employees who want to improve their skills?

<1> yes <5> no <8> DK <9> RF ➡

<q12> Now, I'm going to ask some questions about your participation in the partnership program.

How many years has your organization participated in the partnership program?

<0> less than one year
<1-20> years
<21> 21 years or more <98> DK <99> RF ➡

<q13> What are the reasons your organization originally decided to participate in the partnership?

<1> answered <8> DK <9> RF ➡

<q12b> How many years have you coordinated the program with the partnership students at your organization?

<0> less than one year
<1-20> years
<21> 21 years or more <98> DK <99> RF ➡

<q12a> Did your organization participate in the partnership with any school during the last school year, at any time between September 1, 1992 and now?

<1> yes <5> no <8> DK <9> RF ➡

<q12c> When did your organization last participate in the partnership? Was it

<1> during the regular 1992-93 school year
<5> during this summer?

VOLUNTEERED

<7> year-round/both <8> DK <9> RF ➡

<q16> About how many students involved in the partnership worked at your organization during the last school year?

<0> students <1-94> students <95> 95 students or more

VOLUNTEERED

<97> can't estimate <98> DK <99> RF ➡

<q14> Now, I'm going to read some statements about the partnership and I'd like you to tell me how much you agree or disagree with each. ➡

<q14a> The partnership has been a way to recruit entry level employees for your organization. Do you

<1> strongly agree <2> somewhat agree
<3> neither agree nor disagree <4> somewhat disagree
<5> strongly disagree? <8> DK <9> RF ➡

<q14b> Your organization has participated in the partnership to perform a community service. Do you

<1> strongly agree <2> somewhat agree
<3> neither agree nor disagree <4> somewhat disagree
<5> strongly disagree? <8> DK <9> RF ➡

<q14c> You have been satisfied with the quality of the students enrolled in the partnership. Do you

<1> strongly agree <2> somewhat agree
<3> neither agree nor disagree <4> somewhat disagree
<5> strongly disagree? <8> DK <9> RF ➡

<q15> Are there any other reasons your organization has participated in the partnership?

<1> yes, specify _____ <5> no <8> DK <9> RF ➡

<q17> Has the number of students participating in the partnership at your organization

<1> generally increased <3> generally decreased <5> remained about the same?

VOLUNTEERED

<7> fluctuated from year to year <8> DK <9> RF ➡

<q23> Where in your organization's organization are the partnership students usually placed? _____ ➡

<q22> How many days per week, time of day and number of hours per week do students work? _____ ➡

>q18< How many of the students from the partnership were in paid positions at your organization during the last school year?

<0> none <1-94> students <95> 95 or more students
VOLUNTEERED
<97> can't estimate <98> DK <99> RF ➡

>q19< What was the beginning hourly rate for students employed through the partnership during the last school year?

<1-12> dollars <13> 13 or more dollars
VOLUNTEERED
<x> depends/varies <98> DK <99> RF ➡

>q19b< Are there graduated pay increases for students employed through the partnership?

<1> yes <5> no <8> DK <9> RF ➡

>q20< When considering the costs of employing these partnership students compared with the students' productivity, do you think your organization

<1> makes money
<3> loses money
<5> breaks about even? <8> DK <9> RF ➡

>q21f< During the last school year, did your organization employ any students through the partnership in non-paid positions?

<1> yes <5> no <8> DK <9> RF ➡

>q21< When the partnership students are not in paid positions, do they receive a stipend or some other form of financial assistance from your organization?

<1> yes <5> no <8> DK <9> RF ➡

>q21a< What type of stipend or financial assistance do they receive?

_____ ➡

>q25a< How many high schools did your organization work with during the last school year?

<1> school
<2-10> schools
<11> 11 or more schools <98> DK <99> RF ➡

>q24< Now I'm going to read some statements which may apply to the partnership students' jobs or work site learning experiences. When answering, I'd like you to think about the school that provides the most partnership students for your organization.

Which school is that? _____ ➡

>q24a< Now I'm going to read some statements which may apply to the partnership students' jobs or work site learning experiences. ➡

>q24b< First, does the school require the students to sign a training agreement?

<1> yes <5> no
VOLUNTEERED
<7> depends, specify _____ <8> DK <9> RF ➡

>q24c< Does the school have a written training plan for the students?

<1> yes <5> no
VOLUNTEERED
<7> depends, specify _____ <8> DK <9> RF ➡

>q24d< Do the students have a workplace mentor, either informal or formal?

<1> yes <5> no

VOLUNTEERED

<7> depends, specify _____ <8> DK <9> RF ➡

>q24e< Are the students rotated to different positions or tasks periodically?

<1> yes <5> no

VOLUNTEERED

<7> depends, specify _____ <8> DK <9> RF ➡

>q24f< Is there a formal method used at your organization for evaluating the students' work performance for their school?

<1> yes <5> no

VOLUNTEERED

<7> depends, specify _____ <8> DK <9> RF ➡

>q25< How many times during the last school year has the partnership coordinator for the school visited or telephoned your work site?

<0-100> visits <998> DK <999> RF ➡

>q26a< During the last school year did any problems arise with a partnership student's work performance or behavior?

<1> yes <5> no <8> DK <9> RF ➡

>q26< During the last school year, when a problem arose with a student's work performance or behavior, how satisfied were you with the school's process for resolving it? Were you

<1> very satisfied <2> somewhat satisfied
<3> somewhat dissatisfied <4> very dissatisfied?
<8> DK <9> RF ➡

>q26b< Why were you dissatisfied? _____ ➡

>q27< Does your organization serve on an advisory group for the partnership program?

<1> yes <5> no <8> DK <9> RF ➡

>q27a< Does your organization help recruit students for the partnership?

<1> yes <5> no <8> DK <9> RF ➡

>q27b< Is your organization involved in any other capacity with the partnership?

<1> yes, specify <5> no <8> DK <9> RF ➡

>q28a< How many partnership students have worked at your organization since it became involved in a partnership?

<1> student <2-95> students <96> 96 students or more

VOLUNTEERED

<97> can't estimate <98> DK <99> RF ➡

>q28b< Did the partnership student who worked at your organization become a regular employee after completing the partnership program?

<1> yes <5> no

VOLUNTEERED

<7> the student already was a regular employee <8> DK <9> RF ➡

>q28< Since your firm became involved in the partnership, about how many partnership students have continued to work at your organization after they completed their partnership program?

<0-3> students <4-95> students <96> 96 students or more
VOLUNTEERED:
<97> can't estimate <98> DK <99> RF ➡

>q29< When compared to the turnover rate of employees in similar positions, is the turnover rate among students in the partnership who became regular employees

<1> higher
<2> lower
<3> about the same <4> aren't you sure? <9> RF ➡

>q30< Because of its participation in the partnership, has your organization received any wage subsidies?

<1> yes <5> no <8> DK <9> RF ➡

>q30c< What was the funding source of the wage subsidies? ➡

>q30d< How much in wage subsidies was received?

<1-99996> dollars
<99997> 100,000 dollars or more <d> DK <r> RF ➡

>q30a< Because of its participation in the partnership, has your organization received a targeted jobs tax credit?

<1> yes <5> no <8> DK <9> RF ➡

>q30e< What was the funding source of the targeted jobs tax credit? ➡

>q30f< How much tax credit was received?

<1-99996> dollars
<99997> 100,000 dollars or more <d> DK <r> RF ➡

>q30b< Because of its participation in the partnership, has your organization received any other form of financial assistance?

<1> yes <5> no <8> DK <9> RF ➡

>q30g< What was the funding source of the financial assistance? ➡

>q30h< How much financial assistance was received?

<1-99996> dollars
<99997> 100,000 dollars or more <d> DK <r> RF ➡

>q31< Over the next two years, does your organization plan to expand its involvement in the partnership?

<1> yes <5> no <8> DK <9> RF ➡

>q31a< I'm going to read some factors that may explain why your organization doesn't plan to expand its involvement in the partnership over the next two years. For each factor, please tell me how important it was in your decision.

First, how important was not having enough work to take on additional students in your organization's decision not to expand its participation in the partnership? Was it

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31b< How important were health and safety laws as a factor in your organization's decision not to expand its participation in the partnership? Were they

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31c< How important were child labor laws as a factor in your organization's decision not to expand its participation in the partnership? Were they

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31d< How important were worker's compensation costs as a factor in your organization's decision not to expand its participation in the partnership? Were they

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31e< How important was the dollar cost of participation relative to productivity as a factor in your organization's decision not to expand its participation in the partnership? Was it

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31i< Overall, would you say that the reactions of current employees to the partnership program are generally positive or negative?

<1> generally positive <5> generally negative

VOLUNTEERED

<7> neither/neutral <8> DK <9> RF

>q31f< How important are negative reactions of current workers to the partnership program as a factor in your organization's decision not to expand its participation in the program? Are they

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31j< Overall, are you generally satisfied or dissatisfied with the school's ability to provide students with the skills they need to perform their jobs successfully?

<1> generally satisfied <5> generally dissatisfied

VOLUNTEERED

<7> neither/neutral <8> DK <9> RF ➡

>q31g< How important is your organization's dissatisfaction with the school's ability to provide students with needed skills as a factor in the decision not to expand participation in the partnership? Is it

<1> very important <3> somewhat important
<5> not too important, <7> not at all important?
<8> DK <9> RF ➡

>q31h< Are there any other reasons you can think of for not expanding your participation in the partnership?

<1> yes, specify <5> no <8> DK <9> RF ➡

>q32a< Currently, how satisfied do you think your organization is with the partnership program? Are they

<1> very satisfied <2> somewhat satisfied
<3> somewhat dissatisfied <4> very dissatisfied?
<8> DK <9> RF ➡

>q32b< What do you think are the reasons for dissatisfaction?

_____ ➡

>q33< When was the last school year your organization participated in this partnership?

<1984> before 1985
<1985-1991> year <9998> DK <9999> RF ➡

>q34< I'm going to read several reasons for not participating in a partnership program. Please tell me if each statement explains why your organization did not participate during the last school year.

First, your organization did not have a position available. Is that a reason why you did not participate during the last school year?

<1> yes <5> no <8> DK <9> RF ➡

>q34a< The student you had the previous year left and was not replaced. Is that a reason why you did not participate during the last school year?

<1> yes <5> no <8> DK <9> RF ➡

>q34b< The school did not have a student available to refer to your organization. Is that a reason why you did not participate during the last school year?

<1> yes <5> no <8> DK <9> RF ➡

>q34c< Were there any other reasons for not participating in the partnership this last school year?

<1> yes, specify <5> no <8> DK <9> RF ➡

>q35< When your organization participated in the partnership, were you generally

<1> very satisfied <2> somewhat satisfied
<3> somewhat dissatisfied <4> very dissatisfied?
<8> DK <9> RF ➡

>q35a< Were you dissatisfied because the school was unresponsive to your concerns?

<1> yes <5> no <8> DK <9> RF ➡

>q35b< Were you dissatisfied because the students were difficult to work with?

<1> yes <5> no <8> DK <9> RF ➡

>q35c< Was there some other reason you were dissatisfied?

<1> yes, specify <5> no <8> DK <9> RF ➡

>q36< What, if anything, would make it possible for your organization to participate in the partnership again? _____ ➡

>dem0< Finally, I have several questions about your organization. Please describe the primary products or services provided by your organization.

_____ ➡

>dem1< How many people does your organization employ at your location?

<0-9995> employees
<9996> 10,000 or more employees <9998> DK <9999> RF ➡

>dem3< How many employees are full-time?

<0-9995> employees
<9996> 10,000 or more employees <9998> DK <9999> RF ➡

>dem4< The next set of questions asks about four groups of employees. First - managerial and supervisory, second - professional and sales, third - technical and skilled, and, fourth - clerical and unskilled.

Please tell me about what percent are in each group. If there are other types of employees in your firm, your percentages for these four groups do not need to equal 100 percent.

<1> Proceed <9> R CAN'T ANSWER THESE QUESTIONS ➡

>dm4a< First, what percent of employees are in managerial or supervisory positions?

<0-100> percent <998> DK <999> RF ➡

>dem5< What percent of employees are in professional and sales positions?

<0-100> percent <998> DK <999> RF ➡

>dem6< What percent of employees are in technical and skilled trades positions?

<0-100> percent <998> DK <999> RF ➡

>dem7< What percent of employees are in clerical and unskilled positions?

<0-100> percent <998> DK <999> RF ➡

>de7a< What other positions are they? _____ ➡

>dem8< What percent of the employees at your organization would you say turnover each year?

<0> less than one percent
<1-50> percent
<51> more than 50 percent <98> DK <99> RF ➡

>dem9< Has the number of people employed at your organization

<1> increased
<3> remained about the same
<5> decreased?
<8> DK <9> RF ➡

>de10< By what percentage has the employment level increased?

<0-500> percent <501> over 500 percent

VOLUNTEERED

<997> can't estimate <998> DK <999> RF ➡

>de11< By about what percentage has the employment level decreased?

<0-100>

VOLUNTEERED

<997> can't estimate <998> DK <999> RF ➡

>de12< Is there a union at your organization?

<1> yes <5> no <8> DK <9> RF ➡

>de13< Which classifications of employees are represented by the union?

_____ ➡

>de14< About how many non-management employees has your organization hired in the past three years?

<0> none
<1-994> employees
<995> 1000 employees or more

VOLUNTEERED

<996> not in business for three years
<997> can't estimate <998> DK <999> RF ➡

>de15< About how many of the non-management employees were age 21 or younger?

<0> none
<1-994> workers
<995> 1000 workers or more

VOLUNTEERED

<996> not in business for three years
<997> can't estimate <998> DK <999> RF ➡

>de16< In the past three years, did your organization hire anyone with no work experience?

<1> yes <5> no

VOLUNTEERED

<7> not in business for three years <8> DK <9> RF ➡

>de17< Please tell me which of the following statements best describes your organization. Is it

<1> part of a larger company, like a branch office
<2> a single establishment, like a sole proprietorship
<3> a government or non-profit agency (private or public)?

VOLUNTEERED

<4> other, specify _____ <8> DK <9> RF ➡

>de18< Is your organization

<1> U.S. owned
<5> foreign-owned? <8> DK <9> RF ➡

>de19< What country is your organization owned in? _____ ➡

>de20< Approximately what were your organization's gross revenues for 1992?

<0-9999995> dollars
<9999996> 10,000,000 or more dollars <d> DK <r> RF ➡

APPENDIX 4

Employer Survey—In-Person Interview Questions

PART A. Profile of Firm

1. Identify the name and position and organization of the individual responding to this survey.
2. Describe the products and/or services provided by this firm?
3. Is this firm:
   - ____ a family owned business?
   - ____ privately held?
   - ____ the sole facility in a corporation?
   - ____ part of corporation that includes more than one facility of the same type of business?
   - ____ part of a conglomerate that includes more than one facility and more than one type business operation?
4. Is this firm:
   - ____ U.S. owned?
   - ____ foreign-owned? By? (Country)
5. What were the firm's (firm only, if part of a larger corporation or conglomerate) gross revenues for 1992?
6. a. About how many people does your firm employ?
   b. Of the total, how many are:
      - ____ part time employees
      - ____ full time employees
   c. Of the total, about how many are in:
      - ____ managerial/supervisory positions
      - ____ professional/sales positions
      - ____ technical/skilled trades positions
      - ____ clerical/unskilled positions
7. How would you classify your annual turnover rate?
   - ____ less than 5%
   - ____ 5% - 10%
   - ____ 10% - 20%
   - ____ more than 20%

8. Over the last five years, has the employment level:
   - ____ Remained about the same
   - ____ Increased by _____%
   - ____ Decreased by _____%
9. a. Is there a union at your firm? Yes /No
   b. If yes, which classification(s) of employees are represented by the union?
10. a. How many non-management employees have you hired in the last 3 years?
    b. How many of the workers were aged 21 or younger?
    c. Do you ever hire anyone with no work experience? Yes/No
11. What kinds of training is provided to non-management employees?
    - ____ orientation training of about ___ hours
    - ____ use informal ("buddy system") of on the job training
    - ____ registered apprenticeship
    - ____ use vendor provided or other purchased training programs
    - ____ use local technical school or community college for customized training programs?
    - ____ use written on the job training plans?
    - ____ have our own full-time trainer(s)?

PART B. Program Information

12. a. How long has your firm participated in this program? ___ years
    b. Is your firm participating in the program this year? Yes/No
    If no, skip to question 33
    [NOTE: THIS IS THE ONLY SKIP QUESTION ON SURVEY]
13. Give the reason(s) your firm originally decided to participate in this program.
14. Which of the following reasons are accurate statements about why you continue to participate in this program:
    - ____ the students are productive workers
    - ____ this is a way to recruit entry level employees
    - ____ the firm is performing a community service
    - ____ I am satisfied with the quality of the students I get from the program.
15. Are there any other reasons not identified above?
16. How many students at your firm are currently in the program?
17. Over the last five years, has the number:
    - ____ stayed about the same?
    - ____ fluctuated from year to year?
    - ____ generally increased?
    - ____ generally decreased?
18. How many of the students are in paid positions? All / None ____#

19. a. If they are in paid positions, what is their beginning hourly rate?

b. Are there graduated pay increases? Yes/No

c. If yes, how does the student's pay schedule compare to full-time employees in the same job classification?

20. When considering the costs of hiring the student(s) compared with the student's (s') productivity, does the firm

____ break about even?

____ make money?

____ lose money?

21. If the student(s) is/are not in paid positions, does he/she/they receive a stipend or some other form of financial assistance? Yes/No

If yes, identify the type _____

22. What is the student's (s') usual work schedule?

23. Where in the firm's organization is the student(s) placed?

If applicable, what is the student's (s') job classification?

24. Which of the following apply to the student's job or work site learning experience?

____ there is a signed training agreement

____ there is a written training plan

____ the student has a workplace mentor

____ the student is rotated to different positions or tasks periodically

____ there is a formal method for evaluating the student's work performance for the school

25. Check which of the following applies to the administration of the program:

____ a school coordinator visits the work site at least once a month

____ a school coordinator visits the work site less than once a month, but more than twice a year

____ a school coordinator visits only when there is a problem

____ a school coordinator visits the work site less than twice a year

26. If a problem arises with a student's work performance or behavior are you generally satisfied with the process for resolving them?

____ Satisfied

____ Mostly Satisfied

____ Mostly Dissatisfied

____ Dissatisfied

27. Is the firm involved in any other capacity with this program or the school? For example, does the firm

____ serve on an advisory group?

____ help recruit students for the program?

____ other _____

28. Of the students your firm has employed over the last five years, how many have become regular employees?

29. When compared to the turnover rate of employees in similar positions, is the five-year turnover rate among those students who have become regular employees

____ higher?
____ lower?
____ about the same?
____ not sure?

30. Due to its participation, has the firm received

____ any wage subsidies?
____ the targeted jobs tax credit?
____ any other form of financial assistance?

If so, how much and what is the funding source?

31. Which of the following reasons prevents you from expanding your involvement in this program?

____ there is not enough work to take on additional students
____ health and safety laws are a problem
____ child labor laws are a problem
____ worker's compensation costs are a factor
____ the cost of participation is too high for the firm
____ negative reaction of current workers to program
____ dissatisfaction with "schooling" part of the program
____ other_____

32. a. What is your understanding of the students' satisfaction with the program?

____ satisfied
____ mostly satisfied
____ mostly dissatisfied
____ dissatisfied

b. If mostly dissatisfied, what are the causes?

NOTE: THE FOLLOWING QUESTIONS ARE FOR RESPONDENTS WHO ANSWERED "NO" TO QUESTION 12a

33. When was the last year your firm participated in this program?

34. Which of the following reasons explains why you did not participate this year?

____ I did not have a position available
____ The student I had this year left and was not replaced
____ The school did not have a student available to refer
____ other_____

35. When you participated in the program, were you generally

____ satisfied?
____ mostly satisfied?
____ mostly dissatisfied?
____ dissatisfied?

If you were mostly dissatisfied or dissatisfied, what were the reasons?

____ the school was unresponsive

____ the students were difficult to work with

____ other _____

36. Please complete the following statement: I would participate in the program again if _____